

Psychological Abstracts

VOLUME 17 • NUMBER 5 • MAY 1943

EDITOR
WALTER S. HUNTER
(Brown University)

ASSISTANT EDITOR
H. L. ANSBACHER
(Brown University)

WITH THE CO-OPERATION OF

F. C. BARTLETT Cambridge University
R. KURODA Keijo Imperial University
R. NIHARD University of Liège
V. OSIPOV Leningrad
H. PIÉRON Sorbonne
M. PONZO University of Rome
P. RANSCHBURG University of Budapest
M. L. REYMERT Mooseheart, Illinois
L. S. TSAI University of Nanking, Chongtu

~
Editorial Office: BROWN UNIVERSITY, PROVIDENCE,
RHODE ISLAND; Business Office: PRINCE AND LEMON
STREETS, LANCASTER, PENNSYLVANIA AND NORTH-
WESTERN UNIVERSITY, EVANSTON, ILLINOIS. Send
changes of address to: Psychological Abstracts,
Northwestern University, Evanston, Illinois.

CONTENTS

General (including Statistics)	1416-1456
Nervous System	1457-1468
Receptive and Perceptual Processes	1469-1492
Learning, Conditioning, Intelligence (including Attention, Thought)	1493-1521
Motor and Glandular Responses (including Emotion, Sleep)	1522-1550
Psychoanalysis, Dreams, Hypnosis	1551-1567
Functional Disorders	1568-1620
Personality and Character	1621-1627
General Social Processes (including Esthetics)	1628-1669
Crime and Delinquency	1670-1680
Industrial and Personnel Problems	1681-1704
Educational Psychology (including Vocational Guidance)	1705-1747
Mental Tests	1748-1750
Childhood and Adolescence	1751-1768

SUBSCRIPTION \$ 7 . 0 0 A YEAR • FOREIGN \$ 7 . 2 5

PUBLISHED MONTHLY, WITH TWO ISSUES DURING DECEMBER, AT PRINCE AND LEMON STREETS, LANCASTER, PENNSYLVANIA
BY THE AMERICAN PSYCHOLOGICAL ASSOCIATION, INCORPORATED

Entered as second-class matter July 12, 1937, at the post-office at Lancaster, Pa., under the Act of March 3, 1879

AUTHOR INDEX

- Alexander, F., 1416
Alexander, G. H., 1551
Alford, L. B., 1568
Allen, I. M., 1569
Allen, M., 1522
Allers, R., 1705
Allport, G. W., 1628
Amster, F., 1751
Anderson, J. O., 1570
Angiolillo, P. F., 1706
Angyal, A. F., 1571
Anokhin, P. K., 1457
[Anon.], 1417, 1552,
1681, 1682, 1683
Army Medical Library,
1418, 1523, 1553,
1572, 1573, 1629,
1684
Arrington, R. E., 1630
- Baker, G. A., 1419
Baker, W. A., 1685
Baldie, A., 1670
Banerjee, S., 1631
Bangs, J. L., 1574
Barrera, S. E., 1757
Baruch, D. W., 1752
Bateson, G., 1632
Baumgarten, F., 1686
Baumgartner, J. C.,
1637
Bavelsa, A., 1633
Beattie, N. R., 1753
Beckie, H. C., 1575
Becker, H., 1634
Bellows, R. M., 1687
Belyus, E. S. W., 1469
Benedict, M., 1707
Benedict, R., 1420
Berdie, R. F., 1734
Bhattacharyya, H. D.,
1633
Biel, W. C., 1493
Bigelow, J., 1444
Bigelow, M. A., 1754
Billings, M. L., 1524
Blakeslee, G. A., 1576
Bloom, B. S., 1421
Bloomer, H., 1470
Boring, E. G., 1422
Brainerd, A. A., 1688
Breeding, H. A., 1689
Brickner, R. M., 1525,
1556
Briggs, L., 1708
Britt, S. H., 1713
Browman, L. G., 1526
Brown, S. F., 1636
Bullis, H. E., 1742
Burgess, E. W., 1637
Burns, C. L. C., 1671
Burt, H. E., 1577
Buscy, P. R., 1678
- Cama, K. H., 1578
Carhart, R., 1638
Carlington, W., 1554
Carmichael, L., 1690
Carpenter, I. M., 1621
Carper, D., 1709
Carr-Saunders, A. M.,
1672
Cate, J. ten, 1468
Challman, S. A., 1579
Cobb, S., 1580
Coggina, K., 1622
Cowan, E. A., 1581
Cox, K. J., 1720
- Crespi, L. P., 1494
Cronbach, L. J., 1710
Cuthbert, M. V., 1711
Cutts, N. E., 1423
- Davidov, V. G., 1527
Davis, H., 1462
Davis, P. A., 1458
Deming, W. E., 1424
Denny-Brown, D., 1582
Dickinson, H. C., 1639
Dieulaide, F. R., 1583
Diggs, E., 1640
Diringshofen, H. v.,
1691
Dixon, C. M., 1755
Dodd, S. C., 1425
Doll, E. A., 1584
Dollard, J., 1528
Dunning, C. E., 1679
Dressel, P. L., 1712
Dwyer, P. S., 1426
- Edgerton, H. A., 1713
Ella, W. C., 1714
Epstein, S. H., 1585
Erickson, M. H., 1555,
1556, 1557
Evans, F., 1692
Evans, J. T., 1529
- Farris, E. J., 1586
Feder, D. D., 1715
Ferre, C. E., 1693
Fisher, H. M., 1471
Fontes, V., 1387
Force, R. C., 1493
Forlano, G., 1339
Freeman, W., 1588
Freestone, N. W., 1589
Fremont-Smith, F.,
1511
Friedman, P., 1641
Friedman, S., 1609
- Gackstatter, E., 1623
Gajardo, C. S., 1673
Galambos, R., 1472,
1606
Gallagher, C. D., 1473
Gallagher, J. R., 1473
Garcia Miranda, A.,
1674
Garrett, A. C., 1427
Garol, H. W., 1459,
1460
Garrett, H. E., 1428
Gastwirth, P., 1756
Gaw, E. A., 1716
Geldreich, E. W., 1530
Gellhorn, E., 1461
Geoffrey, L., 1424
Gerberich, J. R., 1718
Getelson, M., 1761
Ghosh, B. C., 1642
Ghosh, S. P., 1748
Gibb, C. A., 1624
Gill, M., 1590
Ginsburg, S. W., 1643
Girden, E., 1429, 1474
Goetsch, W., 1644
Goldstein, H., 1717
Goldstein, K., 1462
Gonda, V. E., 1531
Gordon, P. H., 1694
Granath, L. P., 1477
Greene, H. A., 1718
Gregor, A., 1675
- Griffiths, W. J., Jr.,
1591
Grigoriev, N. F., 1475
Grimsley, G., 1476
- Hadley, E. E., 1592
Hagan, M., 1616
Hahn, E. F., 1593
Hakim, M. A., 1719
Halliday, J. L., 1645
Halloran, R. D., 1462,
1594
Hamilton, D. M., 1595
Hanger, E., 1640
Hanson, H., 1646
Hardy, J. D., 1477
Harrison, T., 1634
Harrower, G. J., 1625,
1720
Hayes, S. P., 1749
Hazel, K., 1596
Healy, W., 1666
Hensley, R., 1622
Herget, C. M., 1477
Hertz, K., 1532
Hester, K. B., 1721
Hilton, W., 1463, 1464
Himler, L. E., 1597
Hitch, K. S., 1598
Holt, W. L., Jr., 1599
Hoskins, R. G., 1600
Hull, H. C., 1636
Hulpien, H. R., 1430
Hunt, J. McV., 1529
Hunter, E. D., 1558
Husband, R. W., 1446
Hyslop, G. H., 1559
- Jackson, G. T., 1722
Jackson, M. M., 1533
Jacobson, E., 1534
Jenkins, W. O., 1495,
1496, 1497, 1498,
1507
Johnson, W. H., 1723
Jones, A. H., 1647
Jones, M. F., 1465
Jones, M. R., 1535
Jones, V., 1648
Jorgensen, A. N., 1718
Justman, J., 1717
- Kahn, S., 1724
Kavruks, S., 1725
Kennard, M. A., 1548
Kirkpatrick, F. H., 1695
Koehler, O., 1499
Koopman, L. J., 1468
Kramer, R., 1649
Kravkov, S. V., 1478
Kuhlmann, F., 1431
Kuhn, H. S., 1704
Kuppuswamy, B., 1500
- Lafleur, L. J., 1650
Lambert, R. H., 1614
Lamoureux, R. R., 1506
Latif, I., 1432
Lawley, D. N., 1433
Lazarsfeld, P. F., 1651
Leavitt, H. C., 1601
Lebensohn, J. E., 1479
Leite da Costa, M. I.,
1434
Lippman, H., 1666
Livensy, T. M., 1726
Livingston, P. C., 1480
Locke, N., 1696
- Loken, R. D., 1481
Lourie, R. S., 1757
Louttit, C. M., 1435
Lovel, H. T., 1436
Lowe, J. J. H., 1753
Löwenbach, H., 1466
Lowie, R. H., 1437
Luchins, A. S., 1501
Luckiesh, M., 1482
Ludwig, —, 1652
Lundholm, H., 1438,
1466
- MacDonald, M., 1666
MacIntosh, A., 1653
MacPhee, H. M., 1502
Mannheim, H., 1672
Markham, W. T., 1727
Marmor, J., 1536
Marshman, C. S., 1728
Masani, K. R., 1758
Maslow, A. H., 1537
Massey, R. A., 1688
Mass-Observation, 1654
Matheny, W. G., 1697
McBee, M., 1602
McCord, F., 1655
McGeoch, J. A., 1503
McNemar, Q., 1439
McPeak, C. F., 1698
Mead, M., 1632, 1656
Meernohn Schijman, A.,
1676
Menninger, W. C., 1603
Mennon, T. K. N., 1759
Minaki, L., 1657
Mitchell, H. D., 1699
Mitchell, M. B., 1604
Mitra, S. C., 1631
Mohr, G., 1666
Mohsin, S. M., 1504
Montagu, M. F. A.,
1658
Moore, H. D., 1747
Moore, Madeline, 1666
Moore, Merrill, 1579,
1605
Moreno, F. B., 1760
Morgan, C. T., 1606
Morgan, M. W., 1543
Morrison, A. W., 1440
Morton, M. W., 1505
Mosier, C. I., 1659
Moss, F. K., 1482
Mower, O. H., 1506
Mukherji, N. P., 1441
Mull, H. K., 1622, 1640
Murphy, G., 1511
Murray, E., 1483
Myers, R. C., 1634
- Naidu, P. S., 1442
Neal, L. E., 1607
Needles, W., 1608
Neil, J. H., 1484
Nicholson, M. B., 1761
Nissen, H. W., 1507
Nutt, A. S., 1677
- Oberndorf, C. P., 1560
O'Brien, J. C., 1690
Oldfield, R. C., 1508
Oltman, J. E., 1609
- Palmer, C. E., 1485
Pascual del Roncal, F.,
1762
- Paterson, D. G., 1443,
1729
Patrl, A., 1763
Patton, F. E., 1610
Pátsay-Liebermann, L.,
1764
Peak, H., 1509
Perin, C. T., 1510
Petersen, G. E., 1538
Petrov, V., 1486
Pickford, R. W., 1487
Pillai, B. K., 1561
Pintner, R., 1539
Popenoe, P., 1660
Pophal, R., 1626
Porterfield, A. L., 1611
Prenant, M., 1661
- Rambert, M., 1562
Rand, G., 1693
Raparport, D., 1511,
1590, 1612
Raphael, T., 1597
Remmers, H. H., 1662
Rethlingshafer, D.,
1540
Rheingold, H. L., 1765
Rhodes, E. C., 1672
Richardson, M. W.,
1687
Ridenour, N., 1563
Riesler, K., 1663
Ritzman, C. H., 1613
Robbins, B. S., 1564
Roper, V. J., 1700
Rosander, A. C., 1730
Rosenberg, S. J., 1614
Rosenbluth, A., 1444
Rosenthal, I. S., 1512
Rosenzweig, S., 1513,
1627
Rosner, A. A., 1525
Ross, W. D., 1514
Roucek, J. S., 1731
Roy, S. N., 1732
Russell, R. W., 1664
- Salter, L. A., 1445
Salter, M. D., 1733
Sarason, S., 1627
Sarkar, J. K., 1515
Sastri, N. S. N., 1665
Schaefer, R. L., 1546
Schmeidler, G. R., 1628
Schneider, G. G., 1734
Schonell, F. J., 1735
Schrammel, H. E., 1736
Schultz, R. S., 1701
Schwartz, L. A., 1666
Scoville, M. C., 1615
Seeborg, E., 1766
Selling, T., 1678
Selover, M. S., 1744
Sengupta, N. M., 1541,
1542
Seward, J. P., 1516
Shanas, E., 1425, 1679
Shrodes, C., 1446
Shultz, I. T., 1517
Silverblatt, J., 1756
Simon, A., 1616
Simpson, R. H., 1737,
1738
Skinner, B. F., 1565
Sloane, A. E., 1473
Smart, M. S., 1453
Smith, A. K., 1447
Smith, G. M., 1448
- Smith, R. M., 1767
Sperry, R. W., 1467
Spoerl, H. D., 1449
Staff of the Adjutant
General's Office, 1702
Staub, H., 1680
Stevenson, G. S., 1602
Stoddard, K. B., 1543
Stone, C. P., 1544
Strongin, E. L., 1757
Stroud, J. B., 1739
Stuart, H. C., 1740
Studnitz, G. v., 1488
Stump, N. F., 1750
Summers, J. A., 1703
Symonds, P. M., 1450
- Taba, H., 1741
Tarumians, M. A., 1742
Taylor, C., 1545
Taylor, N., 1546
Teitelbaum, H. A., 1617
Theobald, G. W., 1489
Thornike, E. L., 1667
Thurlow, W. R., 1490
Tiffin, J., 1704
Tinker, M. A., 1729
Tipping, B. J., 1424
Tolman, R. S., 1451
Towle, C., 1666
Trabue, M. R., 1518
Traxler, A. E., 1743,
1744
Treloar, A. E., 1452
Trow, W. C., 1453
Tseng, F. Y. S., 1547
- Underwood, B. J., 1503
- Van Gundy, J., 1446
[Various], 1454, 1745
Varney, H. I., 1595
Verboef, F. H., 1491
Voll, M. M., 1455, 1492
- Waelder, R., 1666
Wall, J. H., 1595
Walter, W. G., 1468
Warburton, F. W., 1519
Ward, A. A., Jr., 1548
Watta, J. W., 1588
Weiss, E., 1618
Weiss, P., 1549
Welch, R. C., 1430
Whites, W. H., 1619
Whitney, D. D., 1550
Wiener, N., 1444
Wilcock, H. D., 1668
Williamson, M., 1746
Wintach, J., 1768
Wolf, A., 1620
Wolters, A. W., 1520
Woodbury, C. B., 1521
Wright, M. E., 1715
Wright, Q., 1669
- Yacorsynaki, G. K.,
1566
Yakovlev, I., 1486
Yakovlev, P. I., 1462,
1594
Yaskin, H., 1525
Yeakel, H. E., 1586
Yerkes, R. M., 1456
Young, D. A., 1567
- Zangwill, O. L., 1508
Zerfoss, K. P., 1747

Psychological Abstracts

VOLUME 17

NUMBER 5

MAY 1943

GENERAL

(incl. Statistics)

1416. Alexander, F. In memoriam: Hugo Staub 1886-1942. *Psychoanal. Quart.*, 1943, 12, 100-105.—Obituary.—M. H. Erickson (Eloise Hospital).
1417. [Anon.] C. M. Louttit. *J. consult. Psychol.*, 1943, 7, 1.—Portrait.—S. G. Dulsky (Rochester, N. Y.).
1418. Army Medical Library. Bibliography of Jan Evangelista Purkyne. (Microfilm.) Washington, D. C.: Photoduplication Service, Army Medical Library, 1942.
1419. Baker, G. A. Correlations between functions of variables. *J. Amer. statist. Ass.*, 1942, 37, 537-539.—The correlation between functions of variables can equal zero. "The purpose of this note is to show that the question of correlating a part with a whole is a very restricted case of a very general situation that is of wide practical and theoretical interest and that in many cases the correlations between functions of variables should be computed and compared with zero or their expected value by means of the usual tests of significance." Examples are given and discussed.—T. G. Andrews (Barnard).
1420. Benedict, R. Franz Boas. *Science*, 1943, 97, 60-62.—Obituary.—F. A. Mole, Jr. (Connecticut).
1421. Bloom, B. S. Test reliability for what? *J. educ. Psychol.*, 1942, 33, 517-526.—Methods which may be applied to tests with low reliability coefficients in utilizing such tests for making generalizations about student behavior are described. These methods include: the division of the range of the test scores into statistically significant classes, the recognition of greater stability of extreme scores attained even on short and unreliable tests, and the combination of probabilities from independent tests of significance.—D. G. Ryans (Cooperative Test Service).
1422. Boring, E. G. The Subcommittee on a Textbook of Military Psychology. *Psychol. Bull.*, 1943, 40, 60-63.—There is a review of the efforts during the last war and the early part of this war to plan textbook materials on military psychology. The present subcommittee of the Emergency Committee in Psychology consists of 4 editors in addition to the editor-in-chief and military consultants who shall treat in a text the following fields: perceptual functions; training, efficiency, and selection; motivation, morale, and personal adjustments; leadership, public opinion, and psychological warfare. The editors have farmed out chapters and sections to other psychologists. 45 of them have already contributed. The style is to be vigorous, alive, practical, interesting, and free from obvious parade of academic learning. The proposed title is *Psychology for the fighting soldier*, the proposed price, 25¢.—F. McKinney (Missouri).
1423. Cutts, N. E. Development of a certification procedure for school psychologists. *J. consult. Psychol.*, 1943, 7, 45-49.—This is a review of the events which led to the adoption of certification requirements for psychological examiners and psychologists in public school work by the State of Connecticut. There are three grades: examiner in training, psychological examiner, and school psychologist. A broad educational program has been established for the grade of psychological examiner. Since 1915 the State Board of Education has been unusually active in promoting psychological services in the public schools.—S. G. Dulsky (Rochester, N. Y.).
1424. Deming, W. E., Tipping, B. J., & Geoffrey, L. Errors in card punching. *J. Amer. statist. Ass.*, 1942, 37, 525-536.—This paper deals with the processing of census data, but many of the conclusions are described as applying to other lines of work. The object of the study was to determine how uncorrected errors would affect the census tabulations and to provide a basis for administering sample verification. 25,000 wrongly punched cards were studied; some punched errors were found to be compensatory, and more errors were found in the right-hand field than in the left. On multiple-error cards it was found that the errors were often related. A 5-fold classification of multiple errors is given and analyzed.—T. G. Andrews (Barnard).
1425. Dodd, S. C. Operational definitions operationally defined. *Amer. J. Sociol.*, 1943, 48, 482-489.—A definition is operational to the extent that it specifies the procedure for identifying or generating the definiendum and finds high reliability for the definition. The logical form of this definition, its gradational phrasing, the concepts of procedure and reliability, and the two types of operational definitions are commented upon. The importance of reliability for scientific work is stressed. Experimental procedures for measuring the utility, the reliability, the validity, and the usage of any concepts defined are suggested, and proposed as criteria for the excellence of any sociological definition. E. Shanas, pp. 489-491, discusses the statements concerning reliable definitions and the "operational definition of an operational definition."—D. L. Glick (Arlington, Va.).
1426. Dwyer, P. S. Recent developments in correlation technique. *J. Amer. statist. Ass.*, 1942, 37, 441-460.—This paper is the author's fifth of a

series on modern calculational methods. "It is the primary aim of this paper to integrate a number of the most useful of these developments into a series of compact and easy techniques." The advances stressed in the presentation include: notation and symbolism, an abbreviation of the Doolittle solution of the normal equations, the identification of terms in the abbreviated Doolittle solution as correlation constants, concise methods for calculating the inverse of a matrix, the use of the incomplete inverse as a substitute for the back solution, and successive multiple correlation constants from the incomplete inverse. A yearly bibliography from 1932 through 1941 is given.—*T. G. Andrews* (Barnard).

1427. **Garnett, A. C.** Scientific method and the concept of emergence. *J. Phil.*, 1942, 39, 477-486.—An empirical approach to the problem of mind and matter is suggested which implies the accepting of an organismic interpretation rather than a theory of emergence of the mental from the non-mental. All organisms are to be interpreted as manifesting complexity of process, within which two irreducibly distinct types of process (the mental and the physical) are functionally integrated into one organic whole. "The life and mind of the human organism are an organic part of the life and mind of a world organism."—*E. B. Knauff* (Brown).

1428. **Garrett, H. E.** The representativeness of a sample. *Amer. J. Psychol.*, 1942, 55, 580-581.—If a sample drawn from a population is random, then the representativeness of the M and SD may be checked by determining the M and SD of another unbiased sample drawn from the same population. This is a check, of course, only if the two samples are drawn from the population without bias.—*D. E. Johannsen* (Skidmore).

1429. **Girden, E.** Continuous recording of pulse and blood pressure. *J. exp. Psychol.*, 1943, 32, 88-90.—An apparatus suitable for recording changes in pulse and blood pressure over periods of time as long as six hours is depicted photographically, sketched, and described verbally in detail.—*M. J. Zigler* (Wellesley).

1430. **Hulpien, H. R., & Welch, R. C.** A gravity writing lever for respiratory tambours. *Science*, 1942, 96, 590.—The authors describe an easy and inexpensive means of using the Marey tambour to take the place of the more expensive respiratory tambour.—*F. A. Mote, Jr.* (Connecticut).

1431. **Kuhlmann, F.** Our changing fashions in methods of research. *Amer. J. Psychol.*, 1942, 55, 569-573.—The author summarizes the development of methods in the field of psychology: the revolt of Wundt and his pupils against the earlier speculative approach, the limitations of the introspective method in dealing with certain problems, the rise of behaviorism, the development of the questionnaire under G. S. Hall and its subsequent growth into the personality inventory, and finally the statistical method. Kuhlmann agrees that the method must be adjusted to the problem, but he feels that often the developments he traces are merely attempts to

avoid the laborious processes of rigorously controlled experimental observation.—*D. E. Johannsen* (Skidmore).

1432. **Latif, I.** Psychology and the future of mankind. *Indian J. Psychol.*, 1941, 16, 1-35.—The dangers and perils to man's physical and mental safety are discussed at length, while the author expounds the belief that the ignorance of the leading intellectuals concerning the real causes of these problems is at the basis for doing nothing. The situation must be adequately diagnosed before it can be remedied. War, for example, continues to rage because its mental determinants have not been psychologically diagnosed and controlled; nor do the statesmen utilize the concept of psychiatric insight. The author examines the many mental disorders to indicate that mankind is steadily heading towards self-destruction and urges the intelligent use of scientific psychology to effect the mental and emotional re-adjustment which is necessary to achieve sanity and stability. The child must be emancipated from all irrational fears; sex education must be undertaken to suit the psycho-sexual level of the individual; parent education must be promoted on a large scale with the establishment of psychological clinics for children; psychoanalytic treatment must become more available; finally, vocational guidance must be extended.—*A. Weider* (New York University).

1433. **Lawley, D. N.** The application of the maximum likelihood method to factor analysis. *Brit. J. Psychol.*, 1943, 33, 172-175.—In previous papers the author put forward a new method of estimating the loadings of a set of tests in a number of factors, given the observed correlations between these tests. This method of factor analysis, though somewhat more laborious than most of those in present use, has certain advantages. In particular, where the number of individuals tested is reasonably large, there is a satisfactory method of deciding how many factors are required to account for the scores obtained. This paper is intended to show how this method may be applied to actual data and to explain the arithmetical calculations required. The data are obtained from the intercorrelations of the scores of 443 boys on 8 intelligence and performance tests.—*M. D. Vernon* (Cambridge).

1434. **Leite da Costa, M. I.** [Obituary notice of the late Ed. Claparède, well known child psychologist, who died in 1940.] *Criança portug.*, 1942, 1, Nos. 1-2.

1435. **Louttit, C. M.** Summarized proceedings and reports of the sixth annual meeting of the American Association for Applied Psychology. *J. consult. Psychol.*, 1943, 7, 1-22.—*S. G. Dulsky* (Rochester, N. Y.).

1436. **L[ovell], H. T.** Edouard Claparède (1873-1940). *Aust. J. Psychol. Phil.*, 1942, 20, 81-85.—Claparède was a pioneer in the introduction of the functional and purposive points of view into psychology in opposition to associationism. His out-

look was highly unified although it covered a wide range of psychological and educational problems; perhaps its basic aspect was a preoccupation with instinct as an adaptive adjustment. His views were in line with those of James and with Gestalt and topological psychology. His work on the psychology of sleep is a typical representative of his methods and general formulations.—*H. D. Spoerl* (American International College).

1437. **Lowie, R. H. Franz Boas, anthropologist.** *Sci. Mon.*, N. Y., 1943, 56, 183-184.—Obituary and portrait.—*E. Girden* (Brooklyn).

1438. **Lundholm, H. Phenomenon and observer in the natural philosophy of Wolfgang Köhler.** *Character & Pers.*, 1942, 11, 128-144.—Much of the philosophy of great writers is revealed in their common sense literary offerings. Six postulates of this common sense language are presented and discussed. They assert that the world is real, that our knowledge of the world is valid, and that knowledge can be shared. When asked what agent does the knowing, the man of letters posits a self or mind. Dualistic interactionism expresses essentially his point of view. A radically different point of view is epiphenomenalism, a form of materialistic monism, which maintains that the brain produces thought or is the cause of experience and consequently the agent intending the acts of knowing. Köhler's position on this matter is ambiguous. When all is considered, he seems to find only an autogenetic and autonomous world, and, strangely enough, after his polemic against associationism, it resembles very much the phenomenal world of Hume.—*M. O. Wilson* (Oklahoma).

1439. **McNemar, Q. In reply to Garrett.** *Amer. J. Psychol.*, 1942, 55, 581-582.—Garrett's argument (see 17: 1428) is answered by suggesting that the real problem is the determination of lack of bias in the selection of two samples. If one can satisfactorily prove lack of bias in the original sample, the second sample is unnecessary. McNemar agrees with Garrett that repeated sampling alone will not detect bias.—*D. E. Johannsen* (Skidmore).

1440. **Morrison, A. W. A graphical device for comparing the form of a given distribution of test scores with the form of the standard distribution for the test.** *J. educ. Res.*, 1942, 36, 218-220.—The author applies the method which he describes to the Garretson-Symonds High School Interest Questionnaire. Each preference score of a member of the experimental group is assigned to the decile class of the standard distribution in which it might fall. The number of scores in the experimental group falling in each decile class of the standard group is then expressed graphically.—*M. Murphy* (Pennsylvania).

1441. **Mukherji, N. P. Why and what in factors.** *Indian J. Psychol.*, 1942, 17, 41-47.—The author decries as unnecessary any debates against the factor theory of Spearman. The fundamental need for factor analysis in psychology is the same as that

for analysis in any other branch of science. Mental factors describe the structure of the mind manifesting itself through the various activities in daily life. The technique is helpful not only in describing different persons with reference to certain traits, but also in breaking up the traits into their components. Factor analysis is a method of abstraction through statistical means.—*A. Weider* (New York University).

1442. **Naidu, P. S. Psycho-analysis and hormic psychology.** *Indian J. Psychol.*, 1941, 16, 47-54.—A plea is made for "hastening the fusion of these two closely allied and complementary systems." The hormic psychologist should respond to the gesture of compromise made by the psychoanalyst and meet him half-way. Such a response would have been virtually made if he would recognize (1) the limitations of his own scheme of instincts and the need for supplementing it by an evolutionary account somewhat similar to that presented by Freud; (2) that the unconscious of Freud cannot be brushed aside since there are in it elements of great value for the correcting method of mapping mental structure; and (3) that the methodology of psychoanalysis is a potent tool for uncovering the hidden motives of human behavior. Similarities of the two disciplines are discussed.—*A. Weider* (New York University).

1443. **Paterson, D. G. Rudolf Pintner, 1884-1942.** *J. consult. Psychol.*, 1943, 7, 50-52.—A brief survey is given of Pintner's life, and tribute is paid to his accomplishments as a teacher and research worker.—*S. G. Dulsky* (Rochester, N. Y.).

1444. **Rosenblueth, A., Wiener, N., & Bigelow, J. Behavior, purpose and teleology.** *Phil. Sci.*, 1943, 10, 18-24.—The behavior of an object is active if the energy of its output is greater in a specific reaction than that of its input. Active behavior is purposeful when it is directed to the realization of a "final condition in which the behaving object reaches a definite correlation in time or in space with respect to another object or event." Thus defined, purposeful behavior requires "negative feed-back"; that is to say, some signals from the goal must direct the behavior. As used by the authors, the term teleology is synonymous with "purpose controlled by feed-back." Understood in this way, teleology is not opposed to determinism.—*R. H. Dotterer* (Pennsylvania State College).

1445. **Salter, L. A. A comment on Deming's classification of problems of inference.** *J. Amer. statist. Ass.*, 1942, 37, 540-542.—The implications of Deming's article (see 16: 4220) are much greater even than the paper would lead one to believe. The implications for social sciences are discussed.—*T. G. Andrews* (Barnard).

1446. **Shrodes, C., Van Gundy, J., & Husband, R. W. [Eds.] Psychology through literature; an anthology.** New York: Oxford University Press, 1943. Pp. xi + 389. \$3.50.—"The purpose of this anthology is to lead the student of human motivation and behavior to a better understanding of himself

and his world through the vicarious experience that literature affords." Primarily designed for outside reading to accompany an introductory course in psychology, the book contains selections in the following fields: (1) formation of the personality, which includes the physical heritage, influence of the family, social and economic pressures, emotional conflicts, and the learning process; and (2) adjustment and maladjustment of the personality, which includes dreams and the unconscious, neuroses, and the psychoses.—*A. B. Hunter* (Brown).

1447. **Smith, A. K.** A glossary of certain child welfare terms, in Spanish, Portuguese, French, and English. *U. S. Child. Bur. Publ.*, 1942, No. 271. Pp. 115.

1448. **Smith, G. M.** Reorientation in psychology courses. *Psychol. Bull.*, 1943, 40, 136-140.—This is a report on the returns of 25 questionnaires sent to colleges, inquiring of the extent and character of reorientation in courses to further the war effort. In 63% of the courses offered some change is anticipated. Greater stress is placed on general orientation and background than on teaching specific techniques deemed useful in military life. The least amount of change is planned in fields already appropriately oriented, such as clinical, educational, and statistical courses. The character and locus of the changes are as follows: Selection is to be stressed in psychometrics, personnel courses, and clinical courses. Wartime problems in civilian populations, and leadership are to be stresses in social psychology. Personal adjustment in military life is to be emphasized in abnormal and clinical courses.—*F. McKinney* (Missouri).

1449. **Spoerl, H. D.** Dynamic aspects of Swedenborg's psychology. *New Phil.*, 1943, 46, 257-268.—Swedenborg presented the mind as a stratified structure consisting of *anima*, *mens*, and *animus*. These show functional similarity to Jung's collective unconscious, personal unconscious, and persona, respectively. The affections of the *anima* and the *animus*, which fall variously into modern categories of drives, sentiments, motives, traits, emotions, and attitudes, were unconscious dynamic processes which emerged into the *mens* or rational mind, occasioning acts of choice. Choice in favor of influences from the *anima* promoted integration of the personality, with a corresponding reduction of egocentricity. "Man is constantly confronted with the choice of ends that signify respectively harmony and disintegration. He is free to choose. From his liberty comes his personality; the perfect and harmonious society demands the free cooperation of the most varied individualities."—*H. D. Spoerl* (American International College).

1450. **Symonds, P. M.** A method of training clinical psychologists for child guidance. *J. consult. Psychol.*, 1943, 7, 41-45.—The method of training used in the Guidance Laboratory of Teachers College meets the requirements stated by the Committee on Professional Training in Clinical (Applied) Psychology of the AAAP. The practical experience

consists of observation of the diagnostic phases of the study of a case, graded participation in these diagnostic procedures, and opportunity to carry on a variety of phases of the treatment process. A one-way vision room, equipped with concealed microphones, is an indispensable aid to the program.—*S. G. Dulsky* (Rochester, N. Y.).

1451. **Tolman, R. S.** The Subcommittee on the Services of Women Psychologists in the Emergency. *Psychol. Bull.*, 1943, 40, 53-56.—This subcommittee of the Emergency Committee in Psychology considers itself a fact-finding group and made recommendations to the National Council of Women Psychologists. Its activities to date were in reference to: (1) preparation of materials on courses for women and on leadership training in civilian life, (2) testing for Selective Service Boards, (3) care of pre-school children, (4) selection of volunteer workers in civilian defense agencies, (5) research in food habits, (6) occupational testing, (7) government service, (8) selection of WAAC officer candidates, and other services. Statements of the work of this subcommittee have been made to groups of interested women.—*F. McKinney* (Missouri).

1452. **Treloar, A. E.** Random sampling distributions. Minneapolis: Burgess Publishing Company, 1942. Pp. 94. \$2.25.—This volume presents a treatment of the basic statistical situations in which variations due to chance errors of sampling must be considered. The relations of observed measures to population parameters are defined, derived, and interpreted. Full discussion is given to the many applications of the null hypothesis. Many practical problems and diagrams illuminate the text. Major topics covered are (1) random sampling distributions of means and mean differences, (2) sampling errors of the standard deviation, (3) comparison of standard deviations and Fisher's *s* distribution, (4) Student's distribution, (5) analysis of variance, and (6) sampling errors of correlations.—*L. S. Kogan* (Rochester).

1453. **Trow, W. C., & Smart, M. S.** Psychologists report their training needs. *J. consult. Psychol.*, 1943, 7, 27-40.—Questionnaires were sent to 151 Michigan psychologists to obtain information that would be helpful in planning a training program for psychologists. Two of the conclusions of the study are: Some agency is needed to set up minimum general requirements in the natural and social sciences (for the undergraduate program). Since psychologists report their greatest number of deficiencies in fields of applied psychology, a study should be made to evaluate "the kind of psychology that is studied in the regular courses."—*S. G. Dulsky* (Rochester, N. Y.).

1454. [Various.] Proposed program of professional training in clinical psychology. *J. consult. Psychol.*, 1943, 7, 23-26.—This is a report of the Committee on Professional Training in Clinical (Applied) Psychology of the American Association for Applied Psychology.—*S. G. Dulsky* (Rochester, N. Y.).

1455. Voll, M. M. [An apparatus for measuring the temperature sense.] *Fiziol. Zh. S.S.S.R.*, 1940, 28, 245-246.—See *Biol. Abstr.* 17: 4357.

1456. Yerkes, R. M. Raymond Dodge: 1871-1942. *Amer. J. Psychol.*, 1942, 55, 584-600.—After obtaining an A.B. in philosophy at Williams College in 1893, Dodge stayed on for a year as assistant librarian, then went to Germany to work under Erdmann, at Halle, where his interest was shifted to psychology. Dodge's mechanical bent was expressed in the invention of the tachistoscope which bears his name. Upon his return to America in 1897 he went to Connecticut Wesleyan in 1898 where he remained until 1924, when he was called to Yale. His stimulating teaching was widely recognized; simultaneously he did much research and developed many pieces of apparatus. His contributions of a military nature during World War I are well known. During the years at Yale his major interest was in the field of muscular coordination and inhibition, many of his publications dealing with optic nystagmus. Complete bibliography. Portrait.—D. E. Johanssen (Skidmore).

[See also abstracts 1549, 1642, 1687.]

NERVOUS SYSTEM

1457. Anokhin, P. K. [Localization of motor impulses in the central nervous system.] *Probl. mot. Neurol. Psichiat.*, [1940?], No. 8, 15 ff.—[Abstracted review; original not seen.] The author believes that he has demonstrated, by performing anastomoses of crossed nerves, that the specificity of the motor centers in the spinal cord is not constant but depends upon the connections with peripheral organs. He also believes that the spinal cord represents an entire functional system within which every central impulse is considerably modified and advanced according to the specificity of synaptic connections which were established ontogenetically.—L. B. Heathers (Smith).

1458. Davis, P. A. Comparative study of the EEG's of schizophrenic and manic-depressive patients. *Amer. J. Psychiat.*, 1942, 99, 210-217.—The findings suggest more cortical activity among the schizophrenics than among the manic-depressives. "It is the degree of synchronization of cortical activity in the EEG's which appears to differentiate the schizophrenics from the manic-depressives." "Choppy" activity was much more common in schizophrenic patients. This activity "is regarded by the author as indicating, primarily, overstimulation or irritation of the cortex, which is due to unsynchronized activity within the central nervous system."—R. Goldman (Boston Psychopathic Hospital).

1459. Garol, H. W. The functional organization of the sensory cortex of the cat, II. *J. Neuropath. exp. Neurol.*, 1942, 1, 320-329.—The method of physiological neuronography, or the plotting of areas of electrocortical response resulting from local strychninization of the cortex, has been used to determine the limits and organization of the sensory

cortex of the cat. Dusser de Barenne's earlier findings with respect to the extent of the sensory cortex were confirmed, but not his conclusions concerning the somatotopic organization of the sensory cortex into complete subdivisions for arm, leg, and face areas. With but one exception all electrocortical responses induced by local strychninization within the sensory area were confined to the sensory cortex; similarly stimulation outside the sensory cortex did not produce responses within the sensory area boundaries. The exception to the above occurred in the case of occipital areas 18 and 19 and frontal area 3; a reciprocal "firing" between these areas without and within the sensory cortex was demonstrated. The mediation of the discharges was via the long antero-posterior bundle connecting occipital and frontal areas.—D. B. Lindsley (Brown).

1460. Garol, H. W. Cortical origin and distribution of corpus callosum and anterior commissures in the cat, III. *J. Neuropath. exp. Neurol.*, 1942, 1, 422-429.—After local strychninization in one hemisphere electrocortical responses were recorded in the other hemisphere of the cat's brain, before and after sectioning of the corpus callosum and anterior commissure. Sectioning of the corpus callosum abolished all responses in the contralateral hemisphere except those of area 21, and they were obliterated by section of the anterior commissure. It was found that certain areas "fire" only symmetrical points of the contralateral hemisphere; certain other areas "fire" symmetrical plus additional areas. Strychninization of some delimited areas suppresses activity bilaterally, and the stimulation of a few areas has no detectable contralateral effect.—D. B. Lindsley (Brown).

1461. Gellhorn, E. Autonomic regulations: their significance for physiology, psychology and neuropsychiatry. New York: Interscience Publishers, 1943. Pp. xii + 373. \$5.50.—Gellhorn presents a summary and analysis of experimental principles bearing on autonomic regulation. The point of view is organismic, and physiological analysis is directed toward understanding the function of the organism as a whole. The first chapters, concerned with respiratory and circulatory regulations in response to alteration of respired gases, include problems of high altitude adjustment. A chapter is devoted to mechanisms regulating cerebral circulation and their bearing on mental function. Mechanisms of autonomic-endocrine integration receive two chapters. Evidence that the vago-insulin system as well as the more familiar sympathico-adrenal system must be considered in evaluating the bodily changes of emotions is elaborated. Experimental data on the integration of autonomic and somatic functions is elaborated as observed in emotion, nutrition, work, and sleep. Extensive consideration is given to neuropsychiatric aspects of autonomic-humoral adjustment, their clinical manifestations, their relation to shock therapy, and their implications for treatment.—C. W. Darrow (Institute for Juvenile Research).

1462. Halloran, R. D., & Yakovlev, P. I. [Eds.] *Seventh post-graduate seminar in neurology and psychiatry, including a review course in military neuropsychiatry, Jan. 5, 1942-April 10, 1942. Third semester: General neurology. Metrop. St. Hosp. coll. Lect., Waltham, Mass., 1942, Pp. vi + 531.*—This volume completes this series of collected lectures (see 17: 1197; 1198) and contains 48 of the 61 lectures delivered on general neurology. The lectures constitute a general résumé of the field of neurology, including anatomy, development, neurophysiology, neurohistopathology, the various neurological diseases and syndromes, neuroroentgenology, and endocrinological aspects of neurology. In Lecture 13, on EEG and its physiological basis, H. Davis states that the significance of the waves is not yet understood. Individual differences are relatively constant. Wave pattern modification may derive from activity, emotional reactions, external stimulation, sleep, and metabolic and pathological processes. In Lecture 14, K. Goldstein deals with the problem of cerebral localization from a clinical point of view. He stresses the fact that there can be a localization of symptoms but not a localization of function since every mental performance involves a dynamic process which concerns the entire cortex. Yet, symptoms may be simply expressions of the personality struggle in attempting to cope with a defect and with the demands of the environment.—*M. H. Erickson* (Eloise Hospital).

1463. Hilton, W. *Nervous tissues. I. Nerve cells, terminals, and sense organs. II. Neuroglia, neurons, and synapses. J. Ent. Zool., 1942, 34, 8-22; 42-51.*—See *Biol. Abstr.* 17: 5241.

1464. Hilton, W. *Synapses, nerve growth, neurofibrillae and nerve conduction. J. Ent. Zool., 1942, 34, 75-90.*

1465. Jones, M. F. *The autonomic nervous system in health and disease. Trans. Amer. Acad. Ophthalm. Otolaryng., 1942, 47, 65-74.*—Following a definition of terms relating to the parasympathetic and sympathetic nervous systems, the effects of drugs (adrenalin, atropine, nicotine, and ergotamine) on the autonomic nervous system are outlined. Other topics considered are: endocrine action, emotional disturbances, allergy, and the clarification of vagotonic and sympathetotonic action.—*A. Weider* (New York University).

1466. Lundholm, H., & Löwenbach, H. *Hypnosis and the alpha activity of the electroencephalogram. Character & Pers., 1942, 11, 145-149.*—The results of this study indicate that cortical electroactivity is not affected by modification of seeing and hearing through hypnosis.—*M. O. Wilson* (Oklahoma).

1467. Sperry, R. W. *Transplantation of motor nerves and muscles in the forelimb of the rat. J. comp. Neurol., 1942, 76, 283-321.*—In a series of experiments with rats the flexor and extensor muscles of the forelimb were transposed, or the nerves to these were crossed. The immediate result of this was reversal of foot movements. In no instance were there any readjustments to the reversals of

anatomical arrangements. No evidence of re-education was found. The author believes that the motor neurons continue permanently to discharge in their original innate action phase, demonstrating thereby the unelasticity of basic motor patterns for forelimb coordination. These results are essentially like those previously described by Weiss in hind limbs of rats similarly operated.—*C. P. Stone* (Stanford).

1468. Walter, W. G., Cate, J. ten, & Koopman, L. J. *Elektrenkephalographie nach Entfernung der Hirnrinde. (Electroencephalography after removal of the cortex.) Acta brev. neerl. Physiol., 1940, 10, 84-86.*—See *Biol. Abstr.* 15: 10495.

[See also abstracts 1474, 1525, 1531, 1548, 1589, 1599, 1757.]

RECEPTIVE AND PERCEPTUAL PROCESSES

1469. Belyea, E. S. W. *A test of distance judgment for the selection of aviation personnel. Bull. Canad. psychol. Ass., 1942, 2, 30-31.*—Abstract.

1470. Bloomer, H. *A simple method for testing the hearing of small children. J. Speech Disorders, 1942, 7, 311-312. Also Quart. J. Speech, 1942, 28, 343-344.*—Cooperation of small children in the audiometer test is secured by showing pictures of animals in apparent conversation, and attributing sounds of different pitch to the animals. Requesting the child to "stop" the sound by touching the animal's mouth and to "start" it by removing his finger gives the examiner a check on the child's auditory response.—*W. H. Wilke* (New York University).

1471. Fisher, H. M. *Aniseikonia in routine refraction. Amer. J. Optom., 1942, 19, 475-487.*—Unexplained ocular discomfort, fusion problems, space distortion, and anisometropia suggest that aniseikonia may be present. No screening test is adequate for deciding whether this is the case, and none gives any help at all with patients of the first group because their symptoms arise from compensating for the disparity. In the others, where the disparity is larger, two tests may seem to give tentative support to the diagnosis of aniseikonia: a dissociation test with vertical prisms of the same strength over the two eyes; and a test in which the patient is required to bring a board out about waist-high and hold it so that it appears level, consistent tilting in one direction indicating aniseikonia. Practical optical helps are given for correcting minor difficulties.—*M. R. Stoll* (American Optical Company).

1472. Galambos, R. *Flight in the dark: a study of bats. Sci. Mon., N. Y., 1943, 56, 155-162.*—"(1) Bats cannot avoid obstacles if deaf or unable to use their mouths. (2) Bats give voice to supersonic cries. (3) A characteristic change in the rate of production of the supersonic cries occurs when bats avoid obstacles; this change is almost always absent when normal bats strike obstacles, and it never occurs when deaf bats fly about." Evidence

that bats hear sounds which lie in the supersonic range was obtained by recording cochlear potentials. It is proposed that some characteristic of the pattern of the reflected sound waves of the supersonic cry indicates to the bat the precise location of the obstacles. "Time difference, or intensity difference, or both, constitute the mechanism whereby bats determine precise location of obstacles in their path."—*E. Girden* (Brooklyn).

1473. *Gallagher, J. R., Gallagher, C. D., & Sloane, A. E.* A critical evaluation of pseudo-isochromatic plates and suggestions for testing color vision. *Yale J. Biol. Med.*, 1942, 15, 79-98.—Results of a color-vision testing program at a boys' preparatory school are presented. 726 boys were tested, with 167 re-tests, in addition to 107 girls from a boarding school. Detailed tabulations show the responses to 43 pseudo-isochromatic plates, published by the American Optical Company (see 16: 447), made by normal and color deficient boys and girls, and by boys suspected of color-blindness. The data discloses that only a small number of individuals gave the correct response to each of the plates, that a large number failed more than 10%, and that a variety of different responses were made to the same plate by those with apparently normal color vision. Two revised methods of administering and scoring these plates are suggested, both of which yield more uniform results without sacrificing the validity of the test.—*L. P. Herrington* (Yale).

1474. *Girden, E.* The acoustic mechanism of the cerebral cortex. *Amer. J. Psychol.*, 1942, 55, 518-527.—The present study undertook to map the auditory cortex of the dog by the method of absolute thresholds. The fore-paw flexion conditioning technique was used. Auditory limens were determined for the octaves between 256 and 8192 cycles. Cortical extirpations were made with a suction-pump under nembutal anaesthesia. Post-operative limens were determined as soon as possible after recovery, sometimes within 24 hours. After the postoperative test, the brains were removed and sectioned. Results on 3 animals are reported. Large temporary losses in acuity were found for all animals; in 2 cases the final change in acuity was statistically significant for 4096 and 8192 cycles; for the third animal no losses were statistically significant. The data are considered theoretically, and it is concluded that as far as auditory acuity is concerned, the auditory cortex is not equipotential.—*D. E. Johannsen* (Skidmore).

1475. *Grigoriev, N. F.* [Tactile sensitivity at high altitudes.] *Arkh. biol. Nauk*, 1940, 60, 52-58.—An investigation of tactile sensitivity at high altitudes was conducted by the Elbrus Expedition of the USSR Academy of Sciences and VIEM in 1936. 25 persons were examined at 2250, 4250, and 5300 m. Frey's hair distribution method was employed, calculated by the statistical method of Franz. Findings reveal: (1) While the value of the arbitrary threshold perception of more than one-half of the stimuli remains almost unchanged, sensitivity to-

ward weak subliminal stimuli is increased and that toward strong supraliminal stimuli is decreased at high altitudes. (2) Altitude dominates over acclimatization with regard to skin sensitivity. (3) The lowering of the threshold toward single tactile stimuli may be related to changes in physical factors acting upon skin elevation (decline in barometric pressure). Analysis of reasons for observed changes requires further experimentation under expeditionary terms. English summary.—*R. R. Hilkevitch* (Institute for Juvenile Research).

1476. *Grimsley, G.* A study of individual differences in binocular color fusion. *J. exp. Psychol.*, 1943, 32, 82-87.—50 normal and 6 color-blind subjects were tested. "Of the normals, 66 percent reported 'yellow' to red and green [monochromatic] binocular stimulation under normal conditions, and 38 percent reported 'white' to blue and yellow binocular stimulations. By confining stimulation to the foveal area these percentages were increased to 84 and 90 respectively. With no limit on the areas of the retinas stimulated, 30 percent of the normal subjects reported achieving a binocular mixture of both red and green, and blue and yellow. By confining the stimulation to foveal area, this percentage was increased to 80." Optometric examination of the normal subjects showed that those who achieved color fusion had more equal amounts of corneal astigmatism in both eyes, and manifested less convergence and abduction fatigue. "The 6 red-green blind subjects were given the tests for binocular fusion only. All 6 of them reported 'yellow' to red and green binocular stimulation, and 4 of them reported 'white' to blue and yellow stimulation." Four of the red-green blind individuals saw both red and green as 'yellow.'—*M. J. Zigler* (Wellesley).

1477. *Herget, C. M., Granath, L. P., & Hardy, J. D.* Warmth sense in relation to skin area stimulated. *Amer. J. Physiol.*, 1941, 135, 20-26.—Evidence showing the reliability of the flicker method of studying temperature sensation is discussed. Two kinds of spatial summation for warmth are generalized from the data: (1) occurring peripherally, between branches of a single fiber in all probability; (2) occurring centrally, between two different fibers, but not the result of lowered synaptic resistance. One fiber and its branches serve an area of about 3-5 sq. cm. on the forehead. Areal discrimination of warmth is a changing function of area below 3 sq. cm.; above this area it improves and becomes relatively constant. A general expression for sensory response in terms of threshold is presented for areas on the forehead larger than 3 sq. cm., for intensities below 1000 units. Sensations above threshold obey the same law as does threshold sensation.—*R. L. Solomon* (Brown).

1478. *Kravkov, S. V.* [Odors and color vision.] *Fiziol. Zh. S.S.S.R.*, 1940, 28, 313-322.—See *Biol. Abstr.* 17: 4837.

1479. *Lebensohn, J. E.* An improved unlearnable letter chart. *Trans. Amer. Acad. Ophthal. Otolaryng.*, 1942, 47, 127.—Abstract.

1480. Livingston, P. C. Studies in night vision and night visual judgment as it concerns the ophthalmology of flying. *Irish. J. med. Sci.*, 1942, Ser. 6, No. 198, 177-196.—See *Biol. Abstr.* 17: 4838.
1481. Loken, R. D. The color-meter: a quantitative color-vision test. *Amer. J. Psychol.*, 1942, 55, 563-568.—An instrument for measuring color vision, and the results obtained with it on 109 men seeking entrance into the armed forces are described. Its performance was validated against results obtained with the American Optical Test and the revised Nela Test. The evidence indicates that it is a valid measure of color vision and has many advantages from the standpoint of ease of use.—D. E. Johannsen (Skidmore).
1482. Luckiesh, M., & Moss, F. K. Quantitative relations between light and visibility. *Amer. J. Optom.*, 1942, 19, 488-497.—Visibility is a function of at least 4 variables: size, contrast, brightness, and time. All of these must exceed threshold value, but as one factor is increased, improvement in the others may become less necessary. For instance, visibility in work situations when contrast is necessarily low may be brought up to an arbitrary standard by greatly increasing the illumination. Data are given indicating illuminations required for various types of work, and for the reading of books which were classified as superior and average. Data are also presented showing reduction in visibility of a given object when viewed by sight-saving pupils with various pathological conditions and by normal observers who were made artificially ametropic. In the latter case, effects of the errors were shown to be compensated by increasing the illumination.—M. R. Stoll (American Optical Company).
1483. Murray, E. Congenital and acquired deficiencies of color vision: a protest. *Amer. J. Psychol.*, 1942, 55, 573-576.—The author criticizes the recent studies on color blindness by Dunlap and Loken (see 16: 3457) for (1) confusion of congenital and acquired color deficiency, (2) for confusion of color-weak individuals with true dichromates, (3) for lack of critical judgment in discussing the use of various tests of color blindness, and (4) most particularly for the announcement of cures for color anomalies before such medication has received really adequate checks on its effectiveness.—D. E. Johannsen (Skidmore).
1484. Neil, J. H. Testing the acuity of hearing. *N. Z. med. J.*, 1941, 40, 223-230.—The author discusses the necessity for using a logarithmic scale of decibels in measuring hearing and indicates the deficiencies of the watch tick and whisper tests in clinical work. Hearing loss for speech may be tested with sentences given under standard conditions, and, for this purpose, 30 standardized sentences are presented.—T. G. Andrews (Barnard).
1485. Palmer, C. E. Dark adaptation characteristics of private school children measured with the adaptometer. *Amer. J. publ. Hlth.*, 1941, 31, 1063-1067.—See *Child Developm. Abstr.* 15: 1198.
1486. Petrov, V., & Yakovlev, I. [On the relation between the amount of heat and time of exposure of the skin at threshold sensation.] *Fiziol. Zh. S.S.S.R.*, 1940, 28, 343-344.—See *Biol. Abstr.* 17: 4843.
1487. Pickford, R. W. Some effects of veiling glare in binocular vision. *Brit. J. Psychol.*, 1943, 33, 150-161.—In the first experiment, two subjects were inclined to make different adjustments of apparent equality of two disks, one of which was seen through more haze than the other, according as to whether they worked by size or by distance. Seven other subjects were asked to separate the size and distance methods; but few statistically significant readings were obtained, indicating the disturbing nature of the haze. In the second experiment the subjects were asked to make the adjustments for apparent size and apparent distance (1) under the 'natural' condition with the nearer disk under less glare than the further, and (2), several weeks later, under the 'unnatural' condition with the nearer disk under greater glare. There was no tendency to make the adjustment more consistently under the 'natural' than under the 'unnatural' conditions. There were marked individual differences of susceptibility to change in the experimental conditions. It appears that haze is not generally inclined to make objects look larger or nearer, but is readily inclined to have a very irregular effect.—M. D. Vernon (Cambridge).
1488. Studnitz, G. v. Zapfensubstanz und Sehpurpur. (Cone substance and visual purple.) *Naturwissenschaften*, 1941, 29, 65-77.
1489. Theobald, G. W. Referred pain: a new hypothesis. Ceylon: Times of Ceylon, Ltd., 1941. Pp. 40. 2s. 6d.—[Abstracted review; original not seen.] The author has made many clinical observations on referred pain, especially on forms of uterine pain such as dysmenorrhea, labor pains, and the pain associated with the silver nitrate treatment of affections of the cervix. This evidence, together with some experimental data, has prompted the hypothesis of a pain apperception center in the brain.—R. L. Solomon (Brown).
1490. Thurlow, W. R. Studies in auditory theory. I. Binaural interaction and the perception of pitch. *J. exp. Psychol.*, 1943, 32, 17-36.—"The pitch of a tone sounding in one ear can be changed by introducing a tone of the same frequency in the other ear, provided both tones are of fairly high intensity. The change in pitch, obtained in the present experiment with tones of a 95 decibel loudness level, is in the same direction as that which results from an increase in the physical intensity of the tone. Furthermore, the pitch of a tone can be changed by introducing a tone of different frequency in the other ear, provided, again, that both tones are of fairly high intensity. The direction of the change, obtained in the present experiment with tones of a 95 decibel loudness level, is almost without exception the same as that found to occur when a tone of the same frequency is presented in the other ear. The pitch of a tone is thus shown to be a function of binaural interaction; control experiments show that

this interaction is not peripheral in nature."—*M. J. Zigler* (Wellesley).

1491. Verhoeff, F. A. A simple quantitative test for acuity and reliability of binocular stereopsis. *Trans. Amer. Acad. Ophthalm. Otolaryng.*, 1942, 47, 158-162.—Abstract.

1492. Voll, M. M. [Restitution of temperature sensitivity and of skin temperature after repeated local applications of cold and heat.] *Fiziol. Zh. S.S.S.R.*, 1940, 28, 235-244.—See *Biol. Abstr.* 17: 4847.

[See also abstracts 1455, 1505, 1512, 1521, 1532, 1538, 1543, 1571, 1610, 1631, 1688, 1689, 1693, 1700, 1703, 1704, 1709, 1729, 1749.]

LEARNING, CONDITIONING, INTELLIGENCE

(incl. Attention, Thought)

1493. Biel, W. C., & Force, R. C. Retention of nonsense syllables in intentional and incidental learning. *J. exp. Psychol.*, 1943, 32, 52-63.—"Twelve nonsense syllables of zero association-value were presented in a planned, random order to two groups of subjects by means of a tachistoscope for .03 second each. Six easily legible but slightly different types of print appeared in each presentation of the list. The usable subjects in the incidental group ($N = 72$) were instructed to observe the syllables and to indicate the most legible printing type for each of the 12 presentations of the list. The usable subjects in the intent group ($N = 48$) were instructed to disregard the printing-type differences and to learn the list of 12 nonsense syllables which was presented to them 5 (or 6) times. Average immediate-recall scores for the two groups were approximately the same. Forty-eight subjects in the non-intent group were matched with the 48 in the intent group on the basis of the number of errors made during observation of the syllables and the number of syllables reproduced correctly after presentation of the material. Recall and recognition scores after a 19-day interval showed no statistically significant differences either between the two total groups or the two matched groups."—*M. J. Zigler* (Wellesley).

1494. Crespi, L. P. Quantitative variation of incentive and performance in the white rat. *Amer. J. Psychol.*, 1942, 55, 467-517.—Three problems are investigated in the present study: the relationship between the magnitude of incentive and the level of performance, magnitude of incentive and the distribution of effort within the performance, and the effects of variation of magnitude of incentive upon level of performance. A 20-ft. runway, with time of running as the criterion, was used. The incentive consisted of food pellets 1/50 gr. in weight; variation was in 4-fold steps of 1, 4, 16, 64, and 256 units. The results show that "as incentive-amount is increased logarithmically, . . . the level of performance . . . describes a flattened sigmoid curve. In the early learning period, . . . as the amount of

incentive is increased in successive groups, the shape of the speed-of-locomotion gradient changes from positively accelerated, through linear, to negatively accelerated." Improvement through practice is localized for small incentives mostly in the middle sectors, for medium and large incentives, in the first sector. Both 4-fold and 16-fold upward shifts in amount of incentive occasion significant 'elation' effects, similar downward shifts occasion significant 'depression' effects. The data are considered in some detail from a theoretical point of view.—*D. E. Johannsen* (Skidmore).

1495. Jenkins, W. O. Studies in the spread of effect. I. The bi-directional gradient in the performance of white rats on a linear maze. *J. comp. Psychol.*, 1943, 35, 41-56.—In an investigation of the Thorndikian spread of effect 35 white rats were run on a series of two-choice diamond-shaped elevated units. The animals were deprived of food for 23 hours preceeding test runs and were rewarded at constant points between two of the choice units. The frequency of repetition of choices on each unit during successive trials was observed. "A bi-directional gradient was obtained in which the frequency with which responses were repeated increased progressively as reward was approached, and decreased in a similar manner following reward. This gradient was found to extend for five units in a backward direction and four units following the point of reward." The differences were statistically reliable. On a second set of 5 trials an overall high frequency of repetition was found. "A final increase in frequency of repetition, beginning at the fifth choice-point following reward, was found which appears to be typical of spread-of-effect studies." "Anticipatory and perseverative responses yielded results similar to the curve of repetitions. These factors appear to be related to the bi-directional gradient in a complex manner."—*L. I. O'Kelly* (U. S. Army).

1496. Jenkins, W. O. Studies in the spread of effect. II. The effect of increased motivation upon the bi-directional gradient. *J. comp. Psychol.*, 1943, 35, 57-63.—"After preliminary training, 25 male albino rats were tested on a series of 20 units consisting of alternative pathways, both of which were open. . . . The motivation employed was 71 hours of food privation, and results were compared with a previous study in which a 23-hour period of starvation was used." A bi-directional gradient of repeated choice was found, extending 4 points preceeding reward and 3 points following. "The conclusion that an increase in drive resulted in a higher frequency of repeating responses was supported by the fact that the increased drive group showed a reliably greater frequency of repetition at 8 of 10 points as compared with the standard group. A change in the shape of the curve under conditions of increased motivation was also suggested by the data."—*L. I. O'Kelly* (U. S. Army).

1497. Jenkins, W. O. Studies in the spread of effect. III. The effect of increased incentive upon

the bi-directional gradient. *J. comp. Psychol.*, 1943, 35, 65-72.—"Thirty albino rats were tested on a series of 20 two-choice units, being rewarded on each trial with a single pellet of food twice the size of that given a standard group." As in the previous experiments of this series, a bi-directional gradient of repetition was found, extending for 5 points preceding reward, and for 4 following. The experimental group showed a higher frequency of repetition of responses at choice points surrounding the reward than did the control group. The differences were statistically reliable for points preceding the reward but not for those following it. When half of the experimental group was given its food in 4 small pellets, a higher frequency of repetition of response was obtained than when the food was given in one large pellet. "These data suggest that consummatory activity has a greater effect than a mere twofold increase in amount of food."—L. I. O'Kelly (U. S. Army).

1498. Jenkins, W. O. A spatial factor in chimpanzee learning. *J. comp. Psychol.*, 1943, 35, 81-84.—"With long training, four chimpanzees failed to reach a high level of performance in a simple discrimination with the stimuli $7\frac{1}{2}$ inches away. When the stimulus-plates were moved closer to the subjects, where they could be pushed against directly, there was a reliable improvement in performance. When the stimuli were returned to their original back position after prolonged overlearning with them forward, the scores of 3 subjects fell off to a level reliably below those with the stimuli forward. This performance with the stimuli back, however, was reliably above chance. The fourth subject reached the criterion of learning employed."—L. I. O'Kelly (U. S. Army).

1499. Koehler, O. Vom Erlernen unbenannter Anzahlen bei Vögeln. (The learning of unnamed amounts in birds.) *Naturwissenschaften*, 1941, 29, 201-218.—This paper is based on approximately 100,000 experiments by the author and his 6 co-workers during which 10,000 feet of moving picture film were exposed from which 4 demonstration films were prepared. 36 stills from these films are reproduced here. In training the animals every precaution was taken to avoid giving signs unknowingly; the experimenter was always outside the animal's vision and hearing. Two principle series of experiments were conducted. (1) Various discrimination experiments showed that the upper limit of simultaneous number judgment is the discrimination of 6 from 5 and that this upper limit is the same for pigeons, parakeets, jackdaws, and man, if for the latter exposure is limited to 1/25 sec. to preclude counting. This ability is based on spacial perception. (2) The second series of experiments is based on temporal perception. The bird was allowed to pick a number of grains out of a larger group, or to take a number of grains presented consecutively at the same place. In these and similar experiments the highest number mastered was again 6. In both series, however, each task was mastered as a discrete

entity, and no evidence was found for the existence of a number concept. Formation of a number concept apparently depends on the exclusively human ability to name a number.—H. L. Ansbacher (Brown).

1500. Kuppuswamy, B. A note on the learning of a 'backward' rat. *Indian J. Psychol.*, 1942, 17, 91-93.—The average rat required 15 days to learn a certain water maze, backward rats required 20-25 days. One rat who required 27 days was exhaustively studied for conditioning behavior. From this study the author concludes that causal relations in learning can be observed with great accuracy and success among animals. Implications are made to the school and home conditions of the backward child.—A. Weider (New York University).

1501. Luchins, A. S. Mechanization in problem solving—the effect of *Einstellung*. *Psychol. Monogr.*, 1942, 54, No. 6. Pp. 95.—The effect of set, developed through the solution of several successive problems by means of a single procedure applicable to all, upon the solution of a similar task which can be solved by a more direct and simple method is studied. The results lead to several hypotheses, chief of which are: (1) If a response is made several times in succession to a number of similar situations, there is a strong general tendency to repeat this response again in a succeeding similar situation. (2) The blind, repetitive activity is not the result of a general, fundamental tendency but is created by special factors in the situation. (3) These E-effects (*Einstellung* effects) are not brought about by mechanization but result from intelligent assumptions, from a kind of reasonable behavior.—D. G. Ryans (Cooperative Test Service).

1502. MacPhee, H. M. Inter-relational influences of three different adjunctive stimuli in punch-board performance. *J. Elisha Mitchell sci. Soc.*, 1941, 57, 212.—Abstract.

1503. McGeoch, J. A., & Underwood, B. J. Tests of the two-factor theory of retroactive inhibition. *J. exp. Psychol.*, 1943, 32, 1-16.—"Two experiments were performed to test the deduction from the two-factor theory of retroactive inhibition which states that proactive inhibition will be less than retroactive inhibition. In the first experiment (Experiment A) 24 subjects learned lists of paired two-syllable adjectives presented in 5 different orders to enforce paired associates learning. The interpolated learning required the subjects to associate new responses to the stimulus words used in the original learning. Original and interpolated learning was for 6 trials, with a basic rest period of 30 min. between original learning and recall. The second experiment (Experiment B) varied from Experiment A in that the pairs of adjectives were presented in a constant order on each trial, and the original and interpolated learning was for only 4 trials. . . . Although the differences between retroactive and proactive inhibition were not significant in either experiment, the consistency of the differ-

ences supports the deduction from the two-factor theory of retroactive inhibition. The present data, when compared with data from the similar experiment by Melton and von Lackum [see 15: 3318], suggest that a critical factor determining the difference between retroactive and proactive inhibition is the degree to which the material involves serial learning."—*M. J. Zigler* (Wellesley).

1504. Mohsin, S. M. The influence of mental set on association. *Indian J. Psychol.*, 1941, 16, 55-61.—The Morse telegraphic key, a lip key, and an electrically controlled stop watch measured the reaction time to 24 stimulus words, 8 requiring part-whole, 8 genus-species, and 8 opposites relations. Three groups of 25 college students each were used as subjects. The responses came from past associations, but their appropriateness to the situation was determined by the mental set which functions in blocking all responses except those suited to the occasion. Quickness and efficiency of response, when the set was engendered, and lowering of efficiency and delay in time, when the set was absent, demonstrate the operation of set. Reinforcement or facilitation, the resistance to change or perseveration, interference, and retroactive inhibition are discussed in relation to the learning process.—*A. Weider* (New York University).

1505. Morton, N. W. The consistency of subjective reports upon Miles' kinephantom. *Bull. Canad. psychol. Ass.*, 1942, 2, 29-30.—The windmill illusion, suggested by Miles as a measure of creative activity (see 8: 5382), is found to be too unreliable to be of value in this regard.—*F. W. Finger* (Virginia).

1506. Mowrer, O. H., & Lamoreaux, R. R. Avoidance conditioning and signal duration—a study of secondary motivation and reward. *Psychol. Monogr.*, 1942, 54, No. 5. Pp. 34.—Instrumental conditioning procedure yields results superior to those obtained by the classical conditioning procedure in situations where the unconditioned stimulus serves as a danger signal. If, as is believed, anxiety-reduction contributes to this result, the instrumental procedure should show even greater effect if modified so that the conditioned stimulus, or danger signal, terminates at the moment that the conditioned response occurs, instead of lasting for an arbitrarily fixed period of time. Three groups of rats were used to test this deduction. The conditioned stimulus was terminated before, with, and after the conditioned response with groups 1, 2, and 3 respectively. The best results were obtained with group 2. This is taken as confirmation of the hypothesis that "a conditioned avoidance response develops on the basis of 'parasitic' reinforcement but is independently perpetuated, under favorable conditions, by the reinforcement resulting from the anxiety-reduction which accompanies termination of the conditioned stimulus." The position is taken that no comprehensive theory of avoidance conditioning is possible without taking the concomitant phenomenon of anxiety and its role as a reinforcing

agent into systematic account.—*D. G. Ryans* (Cooperative Test Service).

1507. Nissen, H. W., & Jenkins, W. O. Reduction and rivalry of cues in the discrimination behavior of chimpanzees. *J. comp. Psychol.*, 1943, 35, 85-95.—"Each of eight adult or near-adult chimpanzees was trained in a visual discrimination habit involving size and brightness differences as cues. Subsequently each subject was given tests, interspersed among further practice trials on the basic habit, in which only one cue was available (single-cue tests) or in which the two cues were opposed to each other (rivalry tests)." The average single-cue test score for the group was 79.3%, and similar results were obtained in the rivalry tests. "In ten cases out of sixteen, and for the group as a whole, the differential stimulus was more effective in the single-cue tests when presented in the context of the negative, rather than in the positive, aspect of the other stimulus dimension." Little additional improvement in performance was noted in the single-cue test scores. Fluctuations of scores on tests in which only size or only brightness was varied were unrelated. "Implications of these facts for the 'continuity' and 'dominance of organization' theories of discrimination learning are discussed. It is concluded that these two theories are not incompatible, but emphasize the role of environmental and structural factors, respectively."—*L. I. O'Kelly* (U. S. Army).

1508. Oldfield, R. C., & Zangwill, O. L. Head's concept of the schema and its application in contemporary British psychology. Part I. Head's concept of the schema. Part II. Critical analysis of Head's theory. Part III. Bartlett's theory of memory. Part IV. Wolters' theory of thinking. *Brit. J. Psychol.*, 1942, 32, 267-286; 33, 58-64; 113-129; 1943, 33, 143-149.—Head introduced his concept of the schema to account for important aspects of postural appreciation and its impairment in certain cases of cortical injury. In Part I, a detailed account of the concept is given, together with some indication of the part which it plays in Head's general theory of sensation. His views on the maintenance of static tone, projection, and 'vigilance' are considered. In Part II, a short critique of the schema theory is presented, together with an assessment of Bartlett's interpretation of Head's views as set forth in a critical review of Head's *Aphasia and kindred disorders of speech*. Part III deals with Bartlett's theory of memory as dealt with in his book on *Remembering*. The relationship of this theory to the views of Head is examined, and the many novel features introduced by Bartlett are critically considered. The most salient of these is held to be the extension of the concept of the schema to account for certain aspects of experience and behavior at the conscious level. These include more specifically perceptual recognition, rote recall, and the acquisition of motor skills. The further assumptions involved in Bartlett's theory of recall, put forward to account for the manifestly reconstructive

character of this process, are examined at some length. Lastly, the relation of the schema concept to Bartlett's views on temperament and personality is briefly indicated. Part IV deals with an extension of the schema theory, which, in the hands of Wolters, has thrown light on important aspects of the problem of conceptual thinking. The more important points in Wolters' theory are expounded, and a short comparison of his theory with that of Bartlett is given. It is suggested that Wolters has applied the notion of the schema in a manner not ultimately consistent with Bartlett's usage, though in some respects more comprehensively. In conclusion, it is argued that the value of the concept of the schema lies above all in the alternative it provides to trace theories of memory. The authors suggest that the formulations of Head, Bartlett, and Wolters, whilst not comprising a positive addition to established knowledge, contribute in an important way to the conditions that render progress in psychology possible.—O. L. Zangwill (Cambridge).

1509. Peak, H. Dr. Dunlap on "The technique of negative practice." *Amer. J. Psychol.*, 1942, 55, 576-580.—An answer to Dunlap's criticism (see 16: 3490) of an experiment in which spelling errors of college girls were eliminated by positive and by negative practice (see 15: 2141).—D. E. Johannsen (Skidmore).

1510. Perin, C. T. A quantitative investigation of the delay-of-reinforcement gradient. *J. exp. Psychol.*, 1943, 32, 37-51.—"Four groups of albino rats, 25 animals in each group, were trained on a bar-pressing response. With one group the food pellet reward was given simultaneously with the occurrence of the response. A second group received food after a delay of 2 seconds following the bar response. The third group was given food after a 5-second delay, and the fourth group after a 10-second delay. A fifth group made up of 16 animals received training with the food reinforcement being delayed 30 seconds. . . . Fifty reinforced trials were given to the animals in each group. The measure of habit strength was response latency (the time required for the response to occur after an animal had been given access to the bar). . . . Since latency is an inverse function of habit strength, the practice curves show a decreasing trend as learning progresses. . . . Two equations are given which describe the exponential constants for the practice curves as functions of the delay interval. Indications are that within the range of 14-21 seconds' delay the exponential constant probably reaches zero."—M. J. Zigler (Wellesley).

1511. Rapaport, D. Emotions and memory. Baltimore: Williams & Wilkins, 1942. Pp. ix + 282. \$3.00.—The aim of this monograph is "to survey the most important contributions . . . in order that we may clarify what has been meant by 'the influence of emotions on memory,' and prepare the ground for further investigations to establish a better understanding of that influence." Chapter headings are as follows: the historical background of the problem,

the problem of emotions, the experimental contributions of general psychology, theoretical contributions of general psychology, the contributions of psychoanalysis, the contributions of hypnosis, contributions of the study of pathological memory phenomena, direct experimental evidence, and conclusions and implications (including "a tentative interpretation of our problem insofar as its present status will allow"). Extensive reference lists are given for each chapter. Foreword by F. Fremont-Smith; preface by G. Murphy.—L. H. McCabe (Cambridge, Mass.).

1512. Rosenthal, I. S. [The effect of blinding on the conditioned motor reflex in dogs.] *Ark. biol. Nauk*, 1940, 58, 61-69.—A study of the conditioned motor reflex in handling the paw and transfer of the reflex (shifting to the other paw) was conducted on two blinded dogs, one of whom was also castrated. The formation of the conditioned reflex and the delayed periods of the reflex were found to be slower than in normal dogs, especially when a weak stimulus was applied. During transfer of the reflex a transitory period emerged, during which one paw, then the other paw was given, a period which cannot be observed in normal dogs, due to the speed of reflex formation. In blinded dogs emphasis is laid upon speed and ease in the formation of the general, and slowness in the formation of the specialized, localized conditioned food motor reactions. All these facts indicate a general decline in function of conditioned motor reflexes in blindness. In the castrated and blinded dog this decline is still more pronounced. English summary.—R. R. Hilkevitch (Institute for Juvenile Research).

1513. Rosenzweig, S. An experimental study of 'repression' with special reference to need-persistent and ego-defensive reactions to frustration. *J. exp. Psychol.*, 1943, 32, 64-74.—"Two groups of subjects were given a series of jig-saw picture puzzles to solve. One of the groups was presented the tasks informally with the avowed purpose of helping the experimenter classify the puzzles for future use. The other group performed the same tasks formally as an 'intelligence test.' All subjects were permitted to finish half of the puzzles but were interrupted in each of the remaining half. They were then requested to name the problems which they had attempted." The first group "recalled the unfinished tasks better than the finished ones (19 remembered more unfinished than finished tasks, 7 did the opposite, while 4 showed no preponderant tendency). Undischarged tension associated with the incomplete tasks was presumably the basis for this effect. The individuals in the 'intelligence test' group, who were presumably motivated in the direction of ego-defense as well as need-persistence, recalled finished tasks more frequently than unfinished ones (17 remembered more finished than unfinished tasks, 8 did the opposite, while 5 showed no preponderant tendency). Here ego-defensive repression may, according to one interpretation, have been instrumental in the forgetting."—M. J. Zigler (Wellesley).

1514. Ross, W. D. Practice improvement and decrement in the code test. *Bull. Canad. psychol. Ass.*, 1942, 2, 34.—Abstract.

1515. Sarkar, J. K. Mental factors in attention errors. *Indian J. Psychol.*, 1942, 17, 35-40.—The author's purpose is to present "the classification of poor observers." 15 stimulus cards, each containing a 7-place series of letters, were exposed one after another, for .2 sec. 350 subjects, 16-23 years old, were used. The author found that "attending is a process of connecting"; that is, good observers can establish connection with the present quickly and correctly, while bad observers wander away from the present and connect themselves with the past and the future. "Attention is selective activities involving the crude beginnings of valuing or judging."—A. Weider (New York University).

1516. Seward, J. P. An experimental analysis of maze discrimination. *J. comp. Psychol.*, 1943, 35, 17-27.—"An experiment was performed to determine the relative importance of reward and non-reward in maze discrimination. Groups of rats were run in single-T alley mazes which permitted comparison of the effect of varying the length of true path and blind from 3 to 12 feet, separately and together. Half of the rats were trained by the correction method (rewarded every trial), half by the non-correction method (rewarded only on trials with initial correct choices)." The results indicated that, by the correction method, increase in length of either blind or true path tended to increase the difficulty of learning, but not reliably. No differences in difficulty between various maze-lengths were observed by the non-correction method. Learning scores were reliably better by the non-correction method than by the correction method. The author suggests a reconciliation of these results with those of habit-reversal experiments by proposing a "two-factor" theory of maze discrimination, involving: (1) "selection of the critical features of the alternate stimulus-complexes, and (2) association of these features with reward and non-reward respectively."—L. I. O'Kelly (U. S. Army).

1517. Shultz, I. T. A study of individual variations on similar learning tests. *Trans. Kans. Acad. Sci.*, 1942, 45, 299-301.—Qualitative and quantitative differences were found in the learning process of a small group of college students on familiar, non-verbal patterns and on simple verbal material. The non-verbal material was in general learned more easily than the verbal. Differences increased as the verbal content became less concrete or less specific.—W. A. Varvel (Texas A. & M.).

1518. Trabue, M. R. The Subcommittee on Learning and Training. *Psychol. Bull.*, 1943, 40, 57-59.—This article lists the personnel of this subcommittee of the Emergency Committee in Psychology and some of the problems explored. A major portion of the article discusses a new method of instruction in the Morse code.—F. McKinney (Missouri).

1519. Warburton, F. W. Influence of short rest pauses on fluctuations of attention. *Brit. J. Psychol.*, 1943, 33, 162-171.—The curve of output, obtained from the addition by children of Kraepelin sheets, is characterized by cycles of geometric periodicity. The effect of rest pauses of 5, 10, 20, or 40 sec. duration upon such geometric cycles was examined. It was found that geometric cycles run through the complete task, cutting across periods of rest, and that other geometric cycles commence immediately after rest.—M. D. Vernon (Cambridge).

1520. Wolters, A. W. Some biological aspects of thinking. *Brit. J. Psychol.*, 1943, 33, 176-183.—The route to a useful psychology of thought is by way of behavior, and not by way of ideas, if we mean by idea a mental entity or content. The conative aspect of thinking should be stressed, as a development of the cardinal function of self-preservation. So far as it involves representative or symbolic conscious processes, thinking is an extension of the development which has given us distance receptors and elaborate musculature. The most important part of this hypothesis is the partial reduction of the process to the operation of the organizations called schemata. The range of schemata is very wide, covering probably all human reaction, cognitive as well as conative. They are operative in the simple act of perception as well as in elaborate practical activity; they are converged and interweave in all skills, in language, sentiments, and instincts. Thus behind any process of thinking stands the personality of the thinker.—M. D. Vernon (Cambridge).

1521. Woodbury, C. B. The learning of stimulus patterns by dogs. *J. comp. Psychol.*, 1943, 35, 29-40.—Dogs were conditioned to respond to various patterns of two stimuli by the instrumental response of lifting a wooden bar with their noses. The stimuli were high- and low-pitched buzzers. "The results were in harmony with the theoretical expectation that the discrimination between two stimuli should be easier than the discrimination between either stimulus and a compound made up of both of them." The results also agreed with "the expectation that the extinction of responses to a compound, carried out while responses to its components are being reinforced, should be more difficult than extinction of responses to the components, carried out while responses to the compound are being reinforced. It was found that the latencies of 'wrong' responses, although they tended to be longer, on the average, than those of correct responses, did not increase indefinitely as the incorrect responses were extinguished." The author emphasizes the complexity of the conditioned stimulus in any case, and points out that the laws of "compound conditioning" are nothing more than statements of the conditions under which learning actually occurs.—L. I. O'Kelly (U. S. Army).

[See also abstracts 1467, 1539, 1587, 1590, 1641, 1697, 1741, 1759.]

MOTOR AND GLANDULAR RESPONSES

(incl. Emotion, Sleep)

1522. Allen, M. Primary hereditary nystagmus; a case study with genealogy. *J. Hered.*, 1942, 33, 454-456.—G. C. Schwesinger (American Museum Natural History).
1533. Army Medical Library. Bibliography of motion sickness. (Microfilm.) Washington, D. C.: Photoduplication Service, Army Medical Library, 1942.
1524. Billings, M. L. Nystagmus through four generations. *J. Hered.*, 1942, 33, 457.—G. C. Schwesinger (American Museum Natural History).
1525. Brickner, R. M., Rosner, A. A., & Yaskin, H. Evidences concerning the neural groundwork underlying certain behavior patterns. *Psychosom. Med.*, 1943, 5, 20-26.—The neural organization underlying 4 emotional states ranging from a relatively simple expression of emotion to a complex psychotic pattern, all closely associated with epileptic behavior, is examined. No evidence was obtained with reference to the location of the neural organization.—P. S. de Q. Cabot (Simmons).
1526. Browman, L. G. The effect of bilateral optic enucleation on the voluntary muscular activity of the albino rat. *J. exp. Zool.*, 1942, 91, 331-344.—Voluntary muscular activity (as recorded by work registering cages) of 64 normal-eyed albino rats and 40 rats with both eyes removed was studied under conditions of (1) normal day-night, (2) continuous light, (3) constant darkness, and (4) an artificial day of 16 hours. It was found that constant light inhibits activity in rats with intact optic systems; that constant darkness obliterates the difference in activity between blinded and normal rats and the difference which normally exists between the sexes; that it is the absence of light rather than the frequency with which light is removed that permits the greater activity. Blinded rats are less active in warmer than in cooler temperatures.—A. Weider (New York University).
1527. Davidov, V. G. [Variability of electrical resistance of the skin in local and general exposure to heat.] *Ark. biol. Nauk.*, 1940, 60, 59-68.—Processes determining the inner electric conductivity of skin tissue, and detected by measuring the resistance to high frequency alternating current (100 kHz), depend upon the magnitude of the outward stimulus. They are distinguished by the constancy of reactions in different subjects or in the same subject over a long time interval. Changes in the galvanic reflex due to changes of the outward stimulus are most pronounced at the site of application of the stimulus. Upon repeated local exposure to heat (warm baths) and general activity of heat (sun and air baths) the intensity of reaction in the same subject diminishes gradually. Direction and intensity of the reaction depend not only upon the magnitude and duration of the heat stimulus but also upon the processes occurring within the organism. English summary.—R. R. Hilkevitch (Institute for Juvenile Research).
1528. Dollard, J. The problem of fear. *Trans. N. Y. Acad. Sci.*, 1942, 5, 17-18.—Abstract.
1529. Evans, J. T., & Hunt, J. McV. The 'emotionality' of rats. *Amer. J. Psychol.*, 1942, 55, 528-545.—The problem of the present study was to determine (1) whether Hall's results on emotionality in the open field could be duplicated under differing conditions of illumination, and (2) whether the emotionality score would be of value in predicting the ease with which animals adjust to certain variations in their environment. From an open field test of 47 rats, the 6 most emotional and the 6 least emotional (as determined by the number of days before the animals ate) were selected. The selected animals were kept in activity cages for 4 weeks. They were then trained in a discrimination box; both food and escape from an electric shock were used as incentives. Urination and defecation ceased before eating in the open field began. Reducing the illumination of the field decreased the number of days before the animals began to eat. 'Emotional' rats adjusted to the activity cage more slowly than 'non-emotional' ones. Training with electric shock as incentive resulted in a decrement in the activity of the 'non-emotional' rats. "Although the extreme groups on the 'emotionality' scale . . . reacted differently in several of our situations, the measures from the open field do not predict whether the activity of 'emotional' or 'non-emotional' Ss will be affected, nor does it predict whether the various situations will increase or decrease activity."—D. E. Johannsen (Skidmore).
1530. Geldreich, E. W. Further studies of the use of the galvanic skin response as a deception indicator. *Trans. Kans. Acad. Sci.*, 1942, 45, 279-284.—"The action of fear, induced by means of shock intimidation and suggestion upon a deception test when the G.S.R. is used as the deception indicator, was investigated. The deceit situation consisted in the denial of a selected card by the subject. A control and experimental deceit situation were used. In the experimental condition the subject was shocked, threatened with further shock, and advised of the efficacy of the apparatus as a 'lie detector.' Under the experimental condition of shock, greater success in detection of deceit was obtained. It may be concluded that the so-called 'cold sweat' of excitement, induced through fear or apprehension, as occurs under laboratory conditions, does not make ineffective the G.S.R. as a deception indicator; on the contrary, under the conditions herein described, it enhances the effectiveness of the response."—W. A. Varvel (Texas A. & M.).
1531. Gonda, V. E. Experimental lesions of the pyramidal tracts in primates, accompanied by a new reflex. *J. Neuropath. exp. Neurol.*, 1942, 1, 344-347.—A new reflex previously described by the author in human subjects and consisting of "prompt dorsiflexion of the big toe . . . when snapping the distal phalanx of the firmly grasped second toe" was tested in a chimpanzee and a monkey after experimental lesions. In the case of the former with ablations of areas 4 and 6 on the left, the new reflex (dorsiflexion

of big toe) could be elicited readily on the right by snapping any of the four outer toes. The new reflex was clearly present, despite absence of Chad-dock, Oppenheim, Gordon, or Schaefer signs and difficulty of elicitation of the Babinski. In the case of the monkey, after the left hemisphere was removed the new reflex persisted in spite of the absence of a Babinski response. The author believes the new reflex is more easily elicited and interpreted in the case of pyramidal tract lesions than are other reflex signs, and that it may be of use in studies of representation in the motor cortex and in the evaluation of cortical dominance.—D. B. Lindsley (Brown).

1532. Herter, K. *Die Vorzugstemperaturen bei Landtieren.* (Preferred temperatures of terrestrial animals.) *Naturwissenschaften*, 1941, 29, 155-164.—This review shows that preferred temperature is related to many problems outside the field of sense physiology proper. Metabolism, physiology, animal psychology, genetics, animal geography, and ecology are involved.—H. L. Ansbacher (Brown).

1533. Jackson, M. M. *Anticipatory cardiac acceleration during sleep.* *Science*, 1942, 96, 564-565.—During sleep, according to one suggestion, when a given body position is maintained for a considerable time, there results an overheating of unventilated portions of the skin and an interference in circulation. These become so irritating that they lead to a change in position. Furthermore, restriction of circulation or increase in skin temperature result in increased heart rate, which suggests that this should be apparent at the time a movement occurs. An experiment was carried out in which cardiographic records of heart rate and kinesiograph records of body movements were made during sleep. The results show the expected increase in heart rate occurring at the time of movements.—F. A. Mote, Jr. (Connecticut).

1534. Jacobson, E. *Innervation and "tonus" of striated muscle in man.* *J. nerv. ment. Dis.*, 1943, 97, 197-203.—The author criticizes Hoefer's conclusions regarding the electrical changes which occur during muscle tonus.—L. B. Heathers (Smith).

1535. Jones, M. R. *The effect of phenobarbital on food and water intake, activity level, and weight gain in the white rat.* *J. comp. Psychol.*, 1943, 35, 1-10.—"Large doses of phenobarbital were injected intraperitoneally into young male white rats six days a week for several weeks. The effect of this treatment on weight gain, food intake, eating habits, water intake, and activity level was measured, and withdrawal effects were also studied. The experimental animals ate less than the controls, and had very different eating habits. They also drank less water and gained less weight. Daytime activity level was probably not different in the two groups, but nocturnal activity in the experimental group was depressed. Withdrawal caused a marked temporary decrease in food intake and a statistically insignificant amount of weight loss. Food intake and rate of weight gain showed no improvement after

withdrawal of the drug. It is concluded that, in learning experiments designed to study the effects of phenobarbital on mental functioning, the use of food or water as incentives is contraindicated."—L. I. O'Kelly (U. S. Army).

1536. Marmor, J. *The role of instinct in human behavior.* *Psychiatry*, 1942, 5, 509-516.—Critical discussion is offered of the loose usage of the term instinct, as shown by the general failure to distinguish between an actual biological need, its presumed aim, its motor-pattern, and its emotional, concomitants, and the consequent characterization of almost every form of behavior as instinctive. Experimental literature on instinctive behavior is reviewed with special mention of the literature on feral children. The author concludes that "to speak of 'human nature,' then, as some form of human behavior, thought, or emotion which is determined by purely biological factors, and which exists even in a state of isolation, is clearly erroneous. There can be no 'human' nature apart from some form of human society, and the character of that 'nature' will inevitably reflect the character of that society." The author then makes a special plea for psychiatry and particularly psychoanalysis to recast the concept of instinct and to bring it into accord with the present-day scientific knowledge. 29-item footnote bibliography.—M. H. Erickson (Eloise Hospital).

1537. Maslow, A. H. *Preface to motivation theory.* *Psychosom. Med.*, 1943, 5, 85-92.—A series of viewpoints which should be incorporated in any sound theory of motivation is presented. The writer's theory, which is consonant with organismic theory, Gestalt psychology, and the beliefs of certain psychoanalytic schools, allows for a hierarchy of goals, purposes, or needs arranged in the following descending order of pre-potency: (1) basic bodily gratifications, (2) safety needs, (3) affection and acceptance, (4) feelings of adequacy and self-esteem, (5) self-actualization. When all wants are unsatisfied, the primary search for gratification will dominate all others in consciousness. When one want is satisfied, a new one, usually the next in the hierarchy, will emerge, although the satisfaction of any of these wants does not exclude the existence of any other.—P. S. de Q. Cabot (Simmons).

1538. Petersen, G. E. *Ear preference.* *J. Speech Disorders*, 1942, 7, 319-321.—In an experiment in which listening to a sound required choice of one ear, 46% of the subjects chose the same ear consistently while the remaining 54% made at least 2 inconsistent choices in 9 trials. "As ear dominance does appear to exist, and as hearing is an essential part of speech, . . . ear preference should be considered in laterality examinations."—C. V. Hudgins (Clarke School).

1539. Pintner, R., & Forlano, G. *Season of birth and mental differences.* *Psychol. Bull.*, 1943, 40, 25-35.—This is a review of studies from 1929 to the present concerned with the relation of intelligence scores to season of birth. The studies are

based on large numbers of subjects, usually in the thousands. The subjects in most studies are children, in one they are adult men, and in two college students. There is a strong suggestion of slightly lower mean intelligence for individuals born in the winter-autumn half of the year, the colder-darker months, than for individuals born in the spring-summer half of the year, the warmer-lighter months. While the difference is generally slight and in many cases well below the conventional limits of significance, it is in some cases well above these limits. Both exogenous and endogenous theories are suggested in explanation of the phenomenon. The phenomenon is seen as merely one aspect of the seasonal fluctuations of numerous physical, mental, and sociological factors. Suggestions are made for future research.—*F. McKinney* (Missouri).

1540. **Rethlingshafer, D.** Measurement of a motor set. *J. exp. Psychol.*, 1943, 32, 75-81.—"Intervening rates, slower or faster than the natural tapping rate, were forced on subjects who were then asked to return to a rate natural to them. Four conditions were investigated: I. Effect on the natural tapping rate when subjects were asked to tap at one-half their natural rate. II-a. Effect on the natural tapping rate when the intervening rate is the same for all subjects, being one-half the average of the preceding group. II-b. Effect on the natural tapping rate when the intervening rate is the same for all subjects, but in this case only one tap per second. III. Effect when all the subjects were forced to go faster than their own rate. . . . The natural rate, though a highly reliable performance, was in all cases changed in the direction of the forced rhythm. The differences between the means of the original natural rate and the return rate were significant except in Condition III. In no condition do the subjects as a group reproduce the forced rhythm, which shows the consistent effect of the natural rhythm."—*M. J. Zigler* (Wellesley).

1541. **Sengupta, N. N.** The concept of mental inheritance. *Indian J. Psychol.*, 1941, 16, 37-45.—The controversy regarding the question of inheritance of mental traits is aired. A clear definition of the concept of trait is undertaken. After the conception of mental heredity is expressed, the methods of study to the problem of heredity are described as: (1) examination of the germ-cells, (2) experimental breeding, (3) statistical examination of the data. The problems of the practical implications of the concept of inheritance are discussed.—*A. Weider* (New York University).

1542. **Sengupta, N. N.** Mind in different physical settings. *Indian J. Psychol.*, 1942, 17, 49-57.—A change in physical environment is commonly followed by changes, large and small, in personality; every region has its specific appeal to the human system. The author describes arctic hysteria. It is more frequent among women, resembles the manic stage in manic-depressive psychosis, increases suggestibility. Siberian people also seem to be subject to nightmares, a peculiar type of somnambulistic

fit, attacks of erotic manias, and a type of schizophrenia which ultimately leads to death by inanition. Illusions that occur in subterranean regions, in isolation in the polar regions, and as effects of altitude are also discussed, and some explanations concerning causality are postulated.—*A. Weider* (New York University).

1543. **Stoddard, K. B., & Morgan, M. W.** Monocular accommodation. *Amer. J. Optom.*, 1942, 19, 460-465.—Although averaged results confirm the view that monocular accommodation does not appreciably exceed .12 diopter, differences of as much as .50 diopter were found for individual observers. A haploscope was used, first to balance accurately the refractive corrections of the two eyes, and then to determine the change in the refractive state of each eye while the eyes fixated binocularly an object at 40 cm. and while lenses of powers from .25 to 1.00 diopter were inserted before one eye. Three curves are given, indicating the great variety in individual responses to such stimulus situations. Differences were also noted for single observers according to whether the stimulus lens was placed before the right or left eye. No significant correlation was found between this sort of variation and eye dominance.—*M. R. Stoll* (American Optical Company).

1544. **Stone, C. P.** Multiply, vary, let the strongest live and the weakest die—Charles Darwin. *Psychol. Bull.*, 1943, 40, 1-24.—This is a review of views concerning the origin of the diversity of instinctive behavior. Behavioral variations as the building stones of a theory of evolution by natural selection are discussed. Darwin's explanations in terms of "acquired" instincts, small hereditary variations, and instigated variations are presented and treated in terms of a history of experimental studies that clarified and modified them. The role of selection and isolation conclude the discussion. The author makes a plea for a study of "the instincts as they are related to the subject of behavioral ecology."—*F. McKinney* (Missouri).

1545. **Taylor, C.** Studies in exercise physiology. *Amer. J. Physiol.*, 1941, 135, 27-42.—High correlations are found between heart rate and work load, but there is involved the factor of training in lowering the heart rate during work. All functions except heart rate tend to reach a plateau during work. The exhaustion trends of metabolic and circulatory functions lack uniformity, while total ventilation becomes excessive.—*R. L. Solomon* (Brown).

1546. **Taylor, N., & Schaefer, R. L.** Non-neoplastic hypergenitalism. *Psychosom. Med.*, 1943, 5, 10-14.—Until recently, very few cases of non-neoplastic hypergenitalism have been reported in the literature. An analysis of the physical, social, and psychological findings from 17 such cases, averaging 15 years 7 months in age and including 12 males and 5 females, enables the reader to form a composite picture of this endocrine type.—*P. S. de Q. Cabot* (Simmons).

1547. Tseng, F. Y. S. The differentiation of anger and fear in the emotional behavior of the rat. *Bull. Canad. psychol. Ass.*, 1942, 2, 35-36.—Abstract.

1548. Ward, A. A., Jr., & Kennard, M. A. Effect of cholinergic drugs on recovery of function following lesions of the central nervous system in monkeys. *Yale J. Biol. Med.*, 1942, 15, 189-228.—Results are reported on the administration to 10 monkeys of the cholinergic drugs to determine their effects on the recovery of motor function following unilateral ablation of areas 4 and 6 of the cerebral cortex. Four monkeys were used as controls. Rate of recovery was based principally on clinical evaluation of changes in the reflexes and of time of return of motion and use to the shoulder, hip, elbow, knee, finger, and toe joints. All of the drugs administered, alone or in combination, increased both the rate and degree of recovery of function. Since the drugs used are known to act as stimulants on the central nervous system, the conclusion is reached that stimulation of activity within a partially destroyed central nervous system is responsible for the increased recovery either through the mechanism of a synaptic modification or through the development of previously absent or non-functioning neuronal connections. The effect is independent of age.—L. P. Herrington (Yale).

1549. Weiss, P. Pain and pleasure. *Phil. phenomenol. Res.*, 1942, 3, 137-144.—Pain and pleasure are regarded as experiences in which we are conscious of an accumulated set of irritations as directly sensed and forming a single experienced whole. Consciousness results when the individual withdraws from the body in order to respond, as an inward unified whole, to the sensed disturbances of his embodied life. In pleasure successful affirmation of the self is achieved through the fact that we are mastering something that could have stood apart from us. Pain indicates that we are losing control over something which we have made an intimate part of ourselves. In this way pleasure and pain are important for our immediate welfare indicating that our unity is maintained or dissolving.—A. A. Rose (Smith).

1550. Whitney, D. D. Family treasures; a study of the inheritance of normal characteristics in man. Lancaster, Pa.: Cattell Press, 1942. Pp. 299. \$3.50.—"This book is written for amateurs in the study of human heredity and for those who are interested in personal inheritance of family traits. It is a simple presentation mainly by photographs of many of the normal traits appearing in families of two or more successive generations." There are 234 figures, selected readings, a subject index, and a glossary.—E. Girden (Brooklyn).

[See also abstracts 1429, 1461, 1467, 1494, 1508, 1511, 1588, 1591, 1599, 1600, 1601, 1613, 1626, 1646, 1658, 1663, 1729, 1757, 1768.]

PSYCHOANALYSIS, DREAMS, HYPNOSIS

1551. Alexander, G. H. A general introduction to therapeutic psychoanalysis. *R. I. med. J.*, 1942, 25,

1-7.—This is a consideration of certain aspects of the theory and technique of therapeutic psychoanalysis. In the field of theory the discussion is confined primarily to the concept of the unconscious mind and the phenomenon of repression. Aspects of technique considered are free association and the transference situation.—M. Keller (Butler Hospital).

1552. [Anon.] An impromptu experiment in telepathy. *J. Amer. Soc. psych. Res.*, 1942, 36, 108-110.—Three women guessed 5 numbers previously prepared in connection with another experiment. They scored 4 hits, a result which would be expected by chance only once in 2900 such experiments.—B. M. Humphrey (Duke).

1553. Army Medical Library. Bibliography of hypnosis. (Microfilm.) Washington, D. C.: Photoduplication Service, Army Medical Library, 1942.

1554. Carington, W. Some recent and prospective methods in psychical research. *J. Amer. Soc. psych. Res.*, 1942, 36, 57-65.—The first method considered is that used in the author's intermedium experiments, in which trance personalities were compared with normal personalities. Word-association, intelligence, and personality tests were given. The second method discussed is that used in the author's studies of the paranormal cognition of drawings. An improved method of scoring is presented.—B. M. Humphrey (Duke).

1555. Erickson, M. H. Hypnotic investigation of psychosomatic phenomena: I. Psychosomatic interrelationships studied by experimental hypnosis. *Psychosom. Med.*, 1943, 5, 51-58.—Hypnotic experimentation with normal subjects showed that "the hypnotic induction of disturbances in any chosen modality of behavior is likely to be accompanied by disturbances in other modalities." An understanding of these interdependencies is necessary to deal effectively with complex psychopathological symptomatology.—P. S. de Q. Cabot (Simmons).

1556. Erickson, M. H., & Brickner, R. M. Hypnotic investigation of psychosomatic phenomena: II. The development of aphasia-like reactions from hypnotically induced amnesias. *Psychosom. Med.*, 1943, 5, 59-66.—Cases are described where amnesia for a specific thought or class of thoughts was induced through hypnosis. Amnesia was also developed for collateral thoughts not suggested by the hypnotist. A neural interpretation of this phenomenon is given.—P. S. de Q. Cabot (Simmons).

1557. Erickson, M. H. Hypnotic investigation of psychosomatic phenomena: III. A controlled experimental use of hypnotic regression in the therapy of an acquired food intolerance. *Psychosom. Med.*, 1943, 5, 67-70.—While having an acutely charged emotional problem, a subject in her early twenties developed an acute gastrointestinal disturbance for which she treated herself by taking a dose of castor oil mixed with orange juice. "This concoction nauseated her. . . . The next day and thereafter the sight, smell or even the thought of oranges caused nausea." In an hypnotically induced state of

regression she drank the juice, and after an amnesia for the trance events was brought about, she was able to regain her former liking for the food the next day, attributing her success to a spontaneous cure.—*P. S. de Q. Cabot* (Simmons).

1558. Hunter, E. D. Subjective difficulties incident to the acceptance of psychoanalysis. *Psychiatry*, 1942, 5, 495-498.—The author, under a pseudonym, discusses briefly personal subjective experiences in entering into the experience of psychoanalysis. Emphasized are the need in analysis to discover exactly what is considered to be the real self, the difficulties that attend a doubt of one's own integrity, the emotions aroused by the analyst-patient relationship, and the discovery of the need to abandon primitive or childish fantasies and concepts.—*M. H. Erickson* (Eloise Hospital).

1559. Hyslop, G. H. The biological approach to psychic phenomena. *J. Amer. Soc. psych. Res.*, 1942, 36, 50-56.—Psychical researchers should attempt to discover by the techniques of the biological sciences what physical or mental processes and what biological characteristics are correlated with supernormal phenomena. The writer presents the cases of 3 of his patients in whom mental or physical disorders seemed to be correlated with telepathic occurrences.—*B. M. Humphrey* (Duke).

1560. Oberndorf, C. P. Consideration of results with psychoanalytic therapy. *Amer. J. Psychiat.*, 1942, 99, 374-381.—The clinical problems of psychoanalytic therapy are brought to the foreground. The discussion concerns the criteria for calling a patient recovered, length of treatment, discontinuation of treatment, tapering-off of treatment, avoidance of hospitalization, and the advisability of supervision of the experienced analyst's work.—*R. Goldman* (Boston Psychopathic Hospital).

1561. Pillai, B. K. Psychical phenomena. *Indian J. Psychol.*, 1942, 17, 82-85.—The author discusses clairvoyance, mediumistic communications, astral journeys, levitation, yogic states, and table tilting and pleads for a psychical research institute in India where he feels that this "occult science may develop in a soil most suited for its growth."—*A. Weider* (New York University).

1562. Rambert, M. Essai sur les psychanalyses d'enfants. (Study of the psychoanalysis of children.) *Z. Kinderpsychiat.*, 1942, 9, 71-81.—For the past 9 years the author has been engaged in a study of the differences between the psychoanalysis of children and of adults. He summarizes his findings under five heads: (1) differences in the mode of expression resulting from the child's intellectual and emotional immaturity, (2) differences in the manner of bringing the unconscious feelings and desires to the conscious level, (3) the manner of resolving the conflicts, (4) the reeducative aspects of the psychoanalysis of children, (5) the form of the transfer between child and analyst. Each of these points is discussed and illustrated by notes from case records.—*F. L. Goodenough* (Minnesota).

1563. Ridenour, N. The relation between clinical experience and attitudes toward psychoanalysis. *Amer. J. Orthopsychiat.*, 1943, 13, 33-41.—The purpose of this study was (1) to discover materials considered valuable and points of view preferred by instructors in mental hygiene, and (2) to learn the relation of these preferences to the amount and type of clinical experience or absence of clinical experience of the instructor. Data was collected by means of a questionnaire sent to 703 persons teaching mental hygiene at the college level. From authors and texts mentioned, comments on psychoanalysis, and amount of emphasis placed on unconscious motivation, it was concluded that instructors with experience in psychiatric clinics are more favorably inclined toward psychoanalysis than instructors without such experience.—*R. E. Perl* (Jewish Board of Guardians).

1564. Robbins, B. S. Evolution of the neurotic present from the traumatic past. *Psychiatry*, 1942, 5, 537-542.—Accepting the rationale of the psychoanalytical concept of the historical past and its effect upon the present, the author takes issue with the implied assumption that the past constitutes a fully formed body which lies dormant, dissociated, or encapsulated in the psyche and which continues to live in the present and to cause continued neurotic behavior through the repetition compulsion. Citing three clinical examples, he offers as the better explanation that neurotic behavior in the present is simply a response of the total personality stimulated by the memories of past experiences. The total character structure of the personality determines a rigid response in contradistinction to a compulsion to repeat. Hence, neurotic behavior merely appears repetitive; the past is not reappearing but rather, similar psychological and social determinants are still causing behavior similar to that of the past.—*M. H. Erickson* (Eloise Hospital).

1565. Skinner, B. F. Reply to Dr. Yacorzynski. *J. exp. Psychol.*, 1943, 32, 93-94.—Skinner insists on the suitability of his own interpretation of Yacorzynski's results and points out a number of differences in the conclusions reached by each of them in the study of these data. (See 17: 1566.)—*M. J. Zigler* (Wellesley).

1566. Yacorzynski, G. K. Dr. Skinner on the 'disintegration of perceptual principles' of psychotics. *J. exp. Psychol.*, 1943, 32, 91-93.—Yacorzynski objects to Skinner's suggestion (see 16: 3411) that the difference in the selection of patterns in the Zenith experiments by psychotic as compared with control subjects denotes 'disintegration of perceptual principles.'—*M. J. Zigler* (Wellesley).

1567. Young, D. A. An anal substitute for genital masturbation in a case of paranoid schizophrenia. *Psychoanal. Quart.*, 1943, 12, 40-44.—A clinical example is cited of a close association, in a psychotic patient's ideation, between his gastrointestinal and his sexual functions, especially masturbation, with the pulling out of pubic hair during defecation

equivalent to masturbation.—*M. H. Erickson* (Eloise Hospital).

[See also abstracts 1442, 1466, 1608, 1627, 1655, 1666, 1680.]

FUNCTIONAL DISORDERS

1568. Alford, L. B. The mental state associated with cerebral lesions. *Psychosom. Med.*, 1943, 5, 15-19.—The conception is advanced that a whole but unstable mentality with a special tendency to become confused and to form complexes accounts more adequately for the aphasia, apraxia, agnosia, and the frontal lobe syndrome than the more generally accepted interpretation based on defect or loss. The predominant role of the cortex in mental function is denied.—*P. S. de Q. Cabot* (Simmons).

1569. Allen, I. M. Foundations of neurosis and allied conditions. *N. Z. med. J.*, 1941, 40, 231-241.—Among the factors discussed are: the anatomy and physiology of emotion including the neural pathways and inhibitory function of the cortex, the conditioned response and its characteristics including emotional factors and experimental neuroses, and pathophysiological factors. The symptom groups of neuroses and allied conditions are discussed in the light of the above factors.—*T. G. Andrews* (Barnard).

1570. Anderson, J. O. The speech examination of aphasic patients. *J. Speech Disorders*, 1942, 7, 361-368.—Three cases of aphasia are reported in which complete speech examinations were made and correlated with autopsy findings. Five generalizations relative to aphasia and language involvement, and the usefulness of speech examination in such cases, are made.—*C. V. Hudgins* (Clarke School).

1571. Angyal, A. F. Speed and pattern of perception in schizophrenic and normal persons. *Character & Pers.*, 1942, 11, 108-127.—Speeds and patterns were studied comparatively by means of tachistoscopic exposures of perceptual material. It was found that the total number of errors and the relation of common to total substitution errors were of diagnostic value. Other variables, ratio of omission errors to total errors, item consistency, and pattern consistency, were effective in differentiating between groups within the schizophrenic population.—*M. O. Wilson* (Oklahoma).

1572. Army Medical Library. Bibliography of homosexuality. (Microfilm.) Washington, D. C.: Photoduplication Service, Army Medical Library, 1942.

1573. Army Medical Library. Bibliography of war neurosis. (Microfilm.) Washington, D. C.: Photoduplication Service, Army Medical Library, 1942.

1574. Bangs, J. L. A clinical analysis of the articulatory defects of the feeble-minded. *J. Speech Disorders*, 1942, 7, 343-356.—Aside from the higher frequency of omissions of individual sounds, feeble-minded children do not differ qualitatively in articulatory speech defects from normal children.

There is a slight positive correlation ($.33 \pm .08$) between speech proficiency and IQ.—*C. V. Hudgins* (Clarke School).

1575. Beccle, H. C. The nature and treatment of some war psychoses. *Med. Pr.*, 1942, 208, 136-139.—War acts precisely in the same manner as any other precipitant, bringing to light a previously unsuspected psychotic potentiality. 50 unselected cases of war psychoses are analyzed in terms of type of psychosis (3 schizophrenics to 1 manic-depressive), precipitating factors (mainly reaction to recruitment rather than wounds or bombing), prognosis (poor in general), and prophylaxis (ideal too difficult). A discussion of treatment is given including prolonged narcosis, electrical and insulin shock, and psychotherapy.—*T. G. Andrews* (Barnard).

1576. Blakeslee, G. A. Neuropsychiatry in war time. *Bull. N. Y. Acad. Med.*, 1942, 18, 775-793.—Blakeslee describes the formation and functioning of the neuropsychiatric service in World War I and his experience overseas. He also gives excerpts from letters of neuropsychiatrists who served in the last war or are serving at present. It now seems unlikely that conditions will approach those of 1917-1918. The greatest mistake then was delay in specialized care. Psychiatric awareness is greatly increasing among officers. Consultation service is being requested more often for reclassification and for disciplinary cases and is required before court martial. The mistake of poor selection of draftees is still being repeated in regions where psychiatrists are scarce.—*M. E. Morse* (Baltimore, Md.).

1577. Burt, H. E. The Subcommittee on Psychological Aspects of Readjustment. *Psychol. Bull.*, 1943, 40, 64.—Brief report by a subcommittee of the Emergency Committee in Psychology, the work of which is still in the planning stage.—*F. McKinney* (Missouri).

1578. Cama, K. H. Remedial work with speech defectives. *Indian J. Psychol.*, 1942, 17, 25-34.—The author presents various theories concerning the development and function of speech disorders; these consist of the viewpoints of the speech correctionist, neurologist, surgeon, psychiatrist, psychologist, physiologist, dentist, educationist, and phonetician. A few typical cases are cited to illustrate the various measures adopted in speech therapy and remedial work done at the Tata Child Guidance Clinic, Bombay.—*A. Weider* (New York University).

1579. Challman, S. A., & Moore, M. The soldier who drinks too much. *Milit. Surg.*, 1942, 91, 648-650.—This article is addressed to non-commissioned and junior commissioned officers, who handle the soldiers' common personal problems. The viewpoint is that the heavy drinker probably has some obscure physiological deficiency and a feeling of inadequacy and inferiority. The problem drinker is amenable to treatment (essentially psychotherapy) by his immediate superiors through explaining the situation to him, developing his self-confidence and feeling of responsibility, and helping him to find

and use substitutes for liquor.—*M. E. Morse* (Baltimore, Md.).

1580. Cobb, S. Review of neuropsychiatry for 1942. *Arch. intern. Med.*, 1942, 70, 1017-1032.—The author presents a discussion of the more important books and the latest journal which was launched in 1942. There then follows a summarization of the recent investigations in psychosomatic medicine including such diseases as asthma, hypertension, arthritis, neurodermitis, colitis, and peptic ulcer. The disorders of the extrapyramidal system, the basal ganglions and allied structures, and the physiology of the extrapyramidal system are also reviewed in light of the recent literature. Discussion of treatment of involuntary movements by drugs, reeducation, and surgical procedures is followed by an outline of the conspicuous advancement made by electroencephalography. The diagnostic aspects of EEG are discussed together with its benefits to psychiatry. 39 references.—*A. Weider* (New York University).

1581. Cowan, E. A. Mutual participation in adjustment techniques as a factor in problems involving present human relationships. *Trans. Kans. Acad. Sci.*, 1942, 45, 274-278.—"Adjustment techniques which are carried on only through contacts between the adjustor and the adjustee are satisfactory only when the adjustee's problems involve merely memories." Where two people who must have significant contacts are not enjoying satisfactory relationships with each other, any attempt at adjustment must deal with the two together rather than separately. Three examples of the use of mutual play therapy (a therapeutic dramatization of events selected by the participants) are presented to illustrate a technique for developing adjustment to present dynamic relationships.—*W. A. Varvel* (Texas A. & M.).

1582. Denny-Brown, D. The sequelae of war head injuries. *New Engl. J. Med.*, 1942, 227, 771-780; 813-821.—This account is concerned with the assessment and treatment of prolonged sequelae of head injury and is based on 400 cases of persistent disability seen by the author. Illustrative case material is included. Of these 400 men, 5.5% were suffering from traumatic epilepsy, 29% from other organic defects, and 65.5% solely or chiefly from psychoneurosis. "The peculiar mixture of trauma and emotional shock that constitutes all war (and most civil) head injuries retains traces of both features throughout the convalescent period. Too frequently, emphasis is laid wholly on either structural damage or psychoneurotic state, with consequent failure to achieve the best results from treatment of both."—*M. Keller* (Butler Hospital).

1583. Dieuaide, F. R. Civilian health in wartime. Cambridge, Mass.: Harvard University Press, 1942. Pp. vi + 328. \$2.50.—Intended for the general reader, this book summarizes the varied aspects of public health in relation to war, with emphasis upon positive health rather than diseases or methods of treatment. Chapter 10, mental calm and vigor, deals

with the considerations of a mental hygiene outlook. This is followed by an epilogue upon morale and the Second World War, discussing those considerations of national and international morale beginning to be understood. Appendix of suggested readings.—*M. H. Erickson* (Eloise Hospital).

1584. Doll, E. A. The Subcommittee on Mental Deficiency. *Psychol. Bull.*, 1943, 40, 48-52.—The formation of this subcommittee was voted by the Emergency Committee in Psychology in May, 1941. History, purpose, and accomplishments of the subcommittee are described. Among the accomplishments to date are listed: a syllabus formulating the concept of mental deficiency in terms of both "history and status with reference to social competence, educational attainment, occupational proficiency and intellectual level;" a syllabus dealing with rapid examination and screening methods; and a list of professional personnel in this field. The subcommittee hopes in time to extend its services in the direction of placement of mental deficient. Cognizance was given to conduct problems of the mentally deficient, problems of training and rehabilitation, and the promotion of effective research. It is anticipated that the efforts of the subcommittee will be projected into the postwar period.—*F. McKinney* (Missouri).

1585. Epstein, S. H. The neurological effects of syphilis. *J. nerv. ment. Dis.*, 1943, 97, 11-26.—The author reviews in some detail the neurological and, to a less degree, the psychological changes characteristic of various forms of neurosyphilis.—*L. B. Heathers* (Smith).

1586. Farris, E. J., & Yeakel, E. H. The susceptibility of albino and gray Norway rats to audiogenic seizures. *J. comp. Psychol.*, 1943, 35, 73-80.—"Gray Norway (32 males, 26 females) and Wistar albino (81 males, 81 females) rats from inbred stocks were air blasted from 21 to 100 days of age. Testing was conducted five minutes a day for five days a week. The gray Norway rats reacted on the average more violently and more frequently than the albinos. The high average percentage of attacks on the part of the grays was the result of a preponderance of highly susceptible animals in this group. High frequency of attacks in a few albino rats suggests factors other than temperament as causing susceptibility to seizures. Rats tested during the spring and summer displayed more attacks than those air blasted in the fall and winter."—*L. I. O'Kelly* (U. S. Army).

1587. Fontes, V. Subsídios para o estudo da compreensão dos fenómenos naturais por crianças mentalmente anormais. (Contribution to the study of the concepts about natural phenomena of mentally abnormal children.) *Criança portug.*, 1942, 1, Nos. 1-2.—[Abstracted review; original not seen.] 12 oligophrenic children who could read and write were asked such questions as: "What is the sun?" "What is rain?" "What is the cold?" The most common answers were in terms of function, e.g. rain is something that makes us wet. A comparison

of the answers with those reported by Piaget led to the conclusion that mental deficiency has its qualitative as well as its quantitative aspects.—*F. L. Goodenough* (Minnesota).

1588. **Freeman, W., & Watts, J. W.** Prefrontal lobotomy; the surgical relief of mental pain. *Bull. N. Y. Acad. Med.*, 1942, 18, 794-812.—The authors present the results of periodic examinations on 136 operated cases. The essential of the operation is complete bilateral interruption of the thalamocortical radiation without cortical injury. The personality transformation is almost entirely emotional: "bleaching of the affect attached to the ego." Emotions are quick but shallow and short-lived. The recovered patient is happy, indolent, impetuous, and tactless, but not offensive, making rather the impression of ingenuousness and enthusiasm. Otherwise, social behavior is adequate. Intelligence is intact, but is freed from self and cannot be used effectively. Both introspections and tests show extraversion. The patients have insight but not self-control, and foresight and constructive imagination are limited mostly to externalities. Results are best in obsessive tension states and involutional depressions, only fair in schizophrenia. Chronic institutional cases, emotionally deteriorated persons, and those whose prepsychotic personality was aggressive, psychopathic, criminal, or alcoholic are unsuited.—*M. E. Morse* (Baltimore, Md.).

1589. **Freestone, N. W.** A brain-wave interpretation of stuttering. *Quart. J. Speech*, 1942, 28, 466-468.—Brain-wave records of 20 adult normal speakers and 20 adult stutterers were made. Comparison of records of 14 separate brain areas for each individual resulted in 44 significant differences ($CR = 2.7$ or above) between stutterers and normals. In addition, 37 "trend" differences ($CR = 2.0$ to 2.7) were found. The 81 differences reported indicate that stutterers have larger and more similar alpha waves than normals. This is interpreted to mean that stuttering accompanies reduced consciousness, and to support the cerebral dominance theory of stuttering.—*W. H. Wilke* (New York University).

1590. **Gill, M., & Rapaport, D.** A case of amnesia and its bearing on the theory of memory. *Character & Pers.*, 1942, 11, 166-172.—An illustrative case of loss of personal identity is presented and discussed in relation to certain hypotheses concerning memory, as follows: (1) that organization and functioning of memory are affected by strivings, affects, and attitudes; (2) that personal identity is the setting of these strivings; (3) that it is lost when strivings become contradictory and are replaced by a single striving; and (4) that communication of traces in recall and recognition takes place when the strivings underlying the traces are similar.—*M. O. Wilson* (Oklahoma).

1591. **Griffiths, W. J., Jr.** The production of convulsions in the white rat. *Comp. Psychol. Monog.*, 1942, 17, No. 8. Pp. 29.—Only after at least 60 stimulations with an electric bell was it possible to differentiate convulsive and normal rats. About

50% of the animals exhibited seizures in response to the bell. Only 10% had seizures in response to a conflict situation without auditory stimulation. Stimuli which were ineffective when used alone, produced seizures when presented in combination. There was much variation from day to day in the incidence of seizures. Providing animals with a shelter (rat-hole) into which they might run when stimulated, reduced by 58% the incidence of seizures. When 4 rats which had been manifesting seizures were bound, no further seizures were elicited. In the light of his results and a critical survey of the literature, the author rejects the audiogenic theory. "The convulsions produced in this study are functional due to stimulation of the emotional centers, and not structural. Fear and escape are the basic principles underlying seizures. . . . Psychological and mechanical methods of alleviating the convulsions add support to our theory. From the results of these experiments, more particularly, from the success of Dilantin Sodium in alleviating the seizures, we offer the suggestion that the seizures . . . are epileptoid reactions precipitated by the emotion of fear."—*N. L. Munn* (Vanderbilt).

1592. **Hadley, E. E., & others.** Military psychiatry—a note on the factor of age. *Psychiatry*, 1942, 5, 543-550.—As a sequel to previous studies (see 16: 581; 17: 549) report is given of the factor of age in the psychiatric suitability of selectees as shown by 2500 consecutive examinations. The finding, summarized in tables and graphs showing various distributions by age, diagnostic groups, and recommendations for acceptance or rejection, demonstrate that the greater the age the higher the rate of psychiatric rejection. The range of rejections extends from 49 per 1000 for the 18-19 year age group to 555 per 1000 for the 44-45 year age group. The greater psychiatric availability of the younger age groups may be significant only of the greater difficulty of psychiatric diagnosis or of the fact that psychiatric disabilities are as yet latent and undeveloped.—*M. H. Erickson* (Eloise Hospital).

1593. **Hahn, E. F.** A study of the relationship between stuttering occurrence and grammatical factors in oral reading. *J. Speech Disorders*, 1942, 7, 329-335.—43 stutterers were required to read a 550-word prose passage. A higher frequency of stuttering was found to occur on words which were of greater importance in conveying the meaning of a sentence (adjectives, nouns, adverbs, and verbs) than on other words.—*C. V. Hudgins* (Clarke School).

1594. **Halloran, R. D., & Yakovlev, P. I.** Course in military neuropsychiatry. *Amer. J. Psychiat.*, 1942, 99, 338-347.—Segregation and disposition of the unfit are problems of military neuropsychiatry. A tentative schedule for a 6-weeks training course in military neuropsychiatry is given.—*R. Goldman* (Boston Psychopathic Hospital).

1595. **Hamilton, D. M., Varney, H. I., & Wall, J. H.** Hospital treatment of patients with psychoneurotic disorders. *Amer. J. Psychiat.*, 1942, 99,

243-247.—Data on 100 psychoneurotic women were compared with those on 100 psychoneurotic men. Mental illness in antecedents was greater among the women than among the men. The men came from small families with a dominant mother and a weak, ineffectual father; the women came from larger families with no consistent parent type. The women, as infants, were healthy.—*R. Goldman* (Boston Psychopathic Hospital).

1596. **Hazell, K.** The diagnosis of psychogenic headache. *Med. Pr.*, 1942, 208, 219-224.—"It is the object of this essay to give a brief general review of headache and the points of difference between psychogenic and other types of headache. Attention will be drawn to the fact that psychogenic headache is but one symptom of a neurosis or psychosis." The characteristics of the neuroses and psychoses which have headaches as prominent features in their symptomatology are described.—*T. G. Andrews* (Barnard).

1597. **Himler, L. E., & Raphael, T.** Manic-depressive psychoses among college students. *Amer. J. Psychiat.*, 1942, 99, 188-193.—In an 11-year period, there were 0.53 new manic-depressive cases, largely women, per 1000 enrolled students. The liberal arts and graduate schools contributed the greater number of cases. Most had their first attacks while in college. Prompt medical and psychiatric treatment enabled a large number to complete their academic work.—*R. Goldman* (Boston Psychopathic Hospital).

1598. **Hitch, K. S.** Rorschach examinations in acute psychiatric admissions. *J. nerv. ment. Dis.*, 1943, 97, 27-39.—50 consecutive admissions to the psychiatric ward of a military hospital were given the Rorschach soon after their arrival at the hospital. The group included psychotics, neurotics, organics, psychopaths, and defectives. The responses from this group were compared with those expected from normals. In general, the results were similar to those found in other studies of such clinical groups, except that signs associated with deteriorated or chronic cases were often lacking.—*L. B. Heathers* (Smith).

1599. **Holt, W. L., Jr.** Investigation of the effect of inhalation of 9 per cent oxygen for 20 minutes in non-psychotic and schizophrenic male subjects. *Amer. J. Psychiat.*, 1942, 99, 406-410.—"It was the purpose of the writer to discover whether the neurophysiologic response of the nervous system of the schizophrenic patients appears to differ in some respects from that of non-psychotic subjects when both are placed under the stress of moderate anoxemia." Neurological examinations, EEG, and EKG tracings and observations were made at regular intervals.—*R. Goldman* (Boston Psychopathic Hospital).

1600. **Hoskins, R. G.** Psychosexuality in schizophrenia—some endocrine considerations. *Psychosom. Med.*, 1943, 5, 3-9.—From all the available evidence it seems unlikely that the inability of the schizophrenic patient to make a normal psychosexual adjustment is due to the amount, balance, or chem-

ical nature of the sex hormones although theoretical possibilities in this direction have been entertained. It is possible that an abnormal sensitivity to the hormones might be responsible for the psychosis, in which case effective therapy would consist in restoring normal responsivity.—*P. S. de Q. Cabot* (Simmons).

1601. **Leavitt, H. C.** Bronchial asthma in the functional psychoses. *Psychosom. Med.*, 1943, 5, 39-41.—Analysis of the records of 11,647 psychotics, confined to the classifications of dementia praecox, manic-depression, and paranoid conditions and located in 5 large mental institutions in Illinois, revealed only 10 asthmatics, with the highest incidence among the manic-depressives. In another survey, not a single case of bronchial asthma was found among mental defectives or epileptics.—*P. S. de Q. Cabot* (Simmons).

1602. **McBee, M., & Stevenson, G. S.** The role of the psychiatric social worker in the selection of men for the armed forces. *Amer. J. Psychiat.*, 1942, 99, 431-434.—Information secured from community records (through the Social Service Exchange) proved extremely helpful to the psychiatrist serving the Medical Advisory Board. When no record existed, the social worker interviewed the registrant and prepared a social history dealing with education, employment, personal and marital relationships, and health. These histories are briefer than those prepared in anticipation of treatment. Approach to the registrant is also more direct. The need for this same type of screening when men enlist is noted. The social worker has an opportunity to direct rejected registrants to sources which can help their individual problems.—*R. Goldman* (Boston Psychopathic Hospital).

1603. **Menninger, W. C.** Fundamentals of psychiatry; types and classification of mental disorders. *J. Kans. med. Soc.*, 1943, 44, 1-4.

1604. **Mitchell, M. B.** Performance of mental hospital patients on the Wechsler-Bellevue and the Revised Stanford-Binet, Form L. *J. educ. Psychol.*, 1942, 33, 538-544.—Correlation between the two sets of measurements from 268 adolescent and adult patients was .89. Younger patients attained higher IQ's on the Binet, older patients, on the Bellevue scale. Patients of low intelligence tended to test lower on the Binet, and brighter patients, higher on the Binet than on the Bellevue scale. Schizophrenics and chronic alcoholics are compared for scores on the verbal and performance scales of the Bellevue.—*D. G. Ryans* (Cooperative Test Service).

1605. **Moore, M.** A didactic note on alcoholism. *J. nerv. ment. Dis.*, 1943, 97, 1-5.—Unless the orthodox medical profession recognizes soon that alcoholism is a medical problem, lay groups and "isms" may take over that field as they took over the field of the neuroses in the last century. Alcoholism falls within the domain of the physician because it is primarily a personality, rather than a social, disorder.—*L. B. Heathers* (Smith).

1606. Morgan, C. T., & Galambos, R. Production of audiogenic seizures by tones of low frequency. *Amer. J. Psychol.*, 1942, 55, 555-559.—Six frequencies between .5 and 10 k.c., at very high intensities (90-149 db.) were used as stimuli. Four rats at a time were exposed, once a week, to the 6 frequencies in irregular order; each exposure lasted 1½ min., and 1-20 min. intervened between exposures. Thereafter the animals were exposed to the jingling of keys for 1½ min. Four k.c. at 134 db. intensity proved the most effective stimulus, inducing 14.9% attacks (out of 167 exposures); .5 k.c. at 149 db. was next, inducing 6.7% of attacks. "The intensity of the 4k.c.-tone was farther above the rat's threshold of hearing than were the intensities of the other tones; .5 k.c. was second in this respect. It is concluded, therefore, that sensation-level for the rat is the important feature of the auditory stimulus in producing seizures, and that, aside from this fact, one frequency is no more important than another."—D. E. Johannsen (Skidmore).

1607. Neal, L. E. A clinical study with a verbal classification test. *Bull. Canad. psychol. Ass.*, 1942, 2, 33-34.—Abstract.

1608. Needles, W. Stigmata occurring in the course of psychoanalysis. *Psychoanal. Quart.*, 1943, 12, 23-39.—Transient stigmatization in the form of linear and punctate reddish discolorations of the palms of the hands occurred on three occasions during the psychoanalysis of a 31-year old man suffering from an anxiety hysteria. Discussion is offered of the precipitating situations, and a brief review is given of the literature on stigmatization.—M. H. Erickson (Eloise Hospital).

1609. Oltman, J. E., & Friedman, S. The role of hostility in affective psychoses. *J. nerv. ment. Dis.*, 1943, 97, 170-196.—In both manic and depressive psychotic episodes hostility towards former love objects is evident. In the manic the hostility is open and direct; in the depressive it finds only a disguised or projected expression and is accompanied by severe self-accusations. The pre-psychotic personality of the manic is often that of a self-satisfied, aggressive extravert. The depressive, on the other hand, is generally an obsessive, anxious, self-depreciating person with an unusually rigid superego which prevents the overt expression of hostile impulses. This may account for the greater effectiveness of shock therapy with depressives than with manics since the therapy may dissipate for the depressive some of his destructive drives. In the occasional patient who shows both manic and depressive episodes, the circumstances preceding the manic attack often provide the patient with a reasonable basis for his hates. The ambivalent feelings of these patients towards their current love objects may be due to the reactivation of their highly ambivalent feelings towards their parents.—L. B. Heathers (Smith).

1610. Patton, F. E. A comparison of the kinaesthetic sensibility of speech-defective and normal-speaking children. *J. Speech Disorders*, 1942, 7,

305-310.—214 speech-defective children scored significantly lower than 214 normal-speaking children on 7 tests for kinaesthetic sensibility (Starling's tests). "A variation in kinaesthetic sensibility may well merit consideration as a possible factor in articulatory difficulties in otherwise apparently normal children."—C. V. Hudgins (Clarke School).

1611. Porterfield, D. L. The problem of response to personality frustration: a concrete example. *Social Forces*, 1942, 21, 75-81.—An analysis of a case of sexual personality frustration in the light of the theories of Dollard, Doob, & others, and Menninger.—E. B. Knauff (Brown).

1612. Rapaport, D. Recent developments in clinical psychology. *Trans. Kans. Acad. Sci.*, 1942, 45, 290-293.—Recently developed techniques in clinical psychology have increased the possibilities of cooperation between psychologist and psychiatrist. The clinical psychologist can now obtain knowledge of the subject's personality, abilities, and problems without resorting to the usual case history method. Some of these new techniques, as employed at the Menninger Clinic, are surveyed.—W. A. Varvel (Texas A. & M.).

1613. Ritzman, C. H. A comparative cardiovascular and metabolic study of stutterers and non-stutterers. *J. Speech Disorders*, 1942, 7, 367-373.—Data for heart rate, sinus arrhythmia, blood pressure, and metabolic rate were obtained during periods of rest from 29 adult stutterers and a like number normal speakers. Results showed that male stutterers are normal in each of these tests. Female stutterers "are likely to show smaller mean changes in heart beat length and to be more regular in changes of heart beat length than normal speakers of their sex."—C. V. Hudgins (Clarke School).

1614. Rosenberg, S. J., & Lambert, R. H. Analysis of certain factors in histories of two hundred soldiers discharged from the Army for neuropsychiatric disabilities. *Amer. J. Psychiat.*, 1942, 99, 164-167.—Of this group, about 1/2 were psychoneurotic, less than 1/3 psychotic, and about 1/6 epileptic for at least one year before induction. Only 18½% had good work records. Family histories in a good many cases were heavily loaded. Military service in itself could not be said to be the cause of the disabilities in the majority of cases.—R. Goldman (Boston Psychopathic Hospital).

1615. Scoville, M. C. Wartime tasks of psychiatric social workers in Great Britain. *Amer. J. Psychiat.*, 1942, 99, 358-363.—The social workers are functioning in both evacuation and reception areas. They have stressed the need for psychiatric services, with the result that since the war 14 new child guidance clinics have been established, chiefly in areas to which large groups have been evacuated. Available reports indicate "the amazing resiliency of children to situations dangerous to life and their marked susceptibility to the uprooting of family life and emotional ties." In new situations all persons responded as individuals in their personal

needs, anxieties, and demands.—R. Goldman (Boston Psychopathic Hospital).

1616. Simon, A., & Hagan, M. Social data in psychiatric casualties in the armed services. *Amer. J. Psychiat.*, 1942, 99, 348-353.—Five objective social factors (previous mental illness, broken home, psychosis in the family, arrests, and alcoholism) were studied in a group of military personnel who became psychotic. 72.2% had one or more of these factors present, and over 12% had 3-5 of them.—R. Goldman (Boston Psychopathic Hospital).

1617. Teitelbaum, H. A. An analysis of the disturbances of the higher cortical functions, agnosia, apraxia and aphasia. *J. nerv. ment. Dis.*, 1943, 97, 44-61.—The ability to recognize words and objects and to understand speech, in the sensory sphere, and to execute voluntary movements and produce meaningful language, in the motor sphere, require complex cortical integrations. A disturbance of these integrations may lead to various forms of agnosias, apraxias, and aphasias. Neurologically, these disturbances are best explained by assuming that there is no precise localization for higher cortical functions but that certain association systems are more vital for a particular function than others. Hence, the same symptoms may result from small focal lesions at these vital points as from extensive or multiple lesions in less essential parts.—L. B. Heathers (Smith).

1618. Weiss, E. Neurocirculatory asthenia; the need for a psychosomatic approach and a revised terminology. *Psychosom. Med.*, 1943, 5, 93-96.—Neurocirculatory asthenia, a psychosomatic disorder, has received increasing attention because of its implications for military life. Basically it is a disorder of the total personality. Although pronounced vasomotor instability may be present, the psychological factors are the most important from the viewpoint of treatment.—P. S. de Q. Cabot (Simmons).

1619. Whiles, W. H. Psychotherapy in the treatment of tics. *Med. Pr.*, 1941, 206, 356-359.—The common background factors in the personality of ticeurs are described. Case histories are cited to indicate that palliative therapy should be discouraged, and the author points out that attempts should be made to find the inciting cause and the symbolic implications of the movements.—T. G. Andrews (Barnard).

1620. Wolf, A. The dynamics of the selective inhibition of specific functions in neurosis. *Psychosom. Med.*, 1943, 5, 27-38.—This is a preliminary report of an experimental demonstration with albino rats. Deprivation of vision and hearing in infancy without organic injury resulted in the animals' responding with great difficulty to the appropriate stimulus under the strain of adult competition. "Integrated capacity to cope with reality is maintained until a rat reaches a competitive impasse. At this point mature responses disintegrate." An analogy is drawn with human neurotic behavior where adults lose highly developed skills

in a retreat to previously serviceable but now outmoded forms of adaptation; they are thus left with inadequately evolved resources.—P. S. de Q. Cabot (Simmons).

[See also abstracts 1458, 1461, 1462, 1508, 1542, 1564, 1565, 1566, 1706, 1722, 1742, 1762.]

PERSONALITY AND CHARACTER

1621. Carpenter, I. M. The common problem of the tertiary crippled. *Crippled Child*, 1943, 20, 125; 139.—The individual crippled after maturity faces entirely different physical and psychological problems than the one crippled at birth or in childhood. The outstanding psychological mechanisms are the feelings of frustration and fear, which tend to reinforce each other in a circular reaction. Psychiatric consultants should be on the staff of every hospital which handles the tertiary cripple, and all those who come in contact with these individuals should study the psychology of fear.—G. S. Speer (Central YMCA College).

1622. Coggins, K., Hensley, R., & Mull, H. K. Introversion and the appreciation of literature. *Amer. J. Psychol.*, 1942, 55, 560-561.—60 college women (seniors) were given the Bernreuter test of introversion; the Riggs poetry test, form C; and the Carroll prose-appreciation test, college form. The following *r*'s were found: introversion-poetry appreciation, $.24 \pm .12$; introversion-prose appreciation, $.19 \pm .08$; introversion-average of prose and poetry appreciation, $.25 \pm .08$.—D. E. Johannsen (Skidmore).

1623. Gackstatter, E. Architekten und Maschinenbauer in typologischer Beleuchtung. (Architects and mechanical engineers in the light of typology.) *Beih. Z. angew. Psychol.*, 1940, No. 88. Pp. 123.—The author took two types, simplified from Jaensch's typology, as the starting point: (1) a type strongly, (2) a type weakly integrated toward the outside world. 103 students at the Stuttgart Institute of Technology, about half of whom studied architecture, the other half mechanical engineering, were the subjects. Their constitutional type was determined according to Kretschmer, their personality type (integration) according to 5 tests (including Rorschach) as used by Jaensch. In addition, they were given a standard group intelligence test by F. Giese, a vocational questionnaire, and two projective tests (a construction test according to Giese and a sandbox test). The findings are summarized as follows: Type 1 as architect, has made a proper vocational choice in accordance with his artistic interests. As engineer, he is more inclined toward the research side. Type 2 as architect, will emphasize the engineering aspects. As engineer, he will tend toward the designing and construction aspects.—H. L. Ansbacher (Brown).

1624. Gibb, C. A. Personality traits by factorial analysis (II). *Aust. J. Psychol. Phil.*, 1942, 20, 86-110.—The preliminary observations and survey (see 16: 4434) were augmented by factorial analysis of the

intercorrelations of 20 tests given to 200 subjects. The tests were personality inventories and tests of personality variables, a general intelligence test also being included. The study yielded 6 factors: emotional instability, self-consciousness, shyness, concentration, verbal fluency, and pictorial fluency. Emotional instability and shyness were found to be related to lower intelligence, and the former quality to femininity. The results were achieved after eliminating the Bernreuter scale (the original 21st test), which confused the factorial picture.—*H. D. Spoerl* (American International College).

1625. Harrower, G. J. **Medical technologists' group personality estimate.** *Canad. J. med. Technol.*, 1942, 4, 177-178.—The Rorschach test was given to 7 men and 24 women medical technologists, whose average age was 28. Results resembled those with physicians. The test revealed rather mature personalities, generally extravert, with a considerable energy reserve, which leads to some degree of frustration due to the routine nature of the work. Comparisons are made with commercial artists and metallurgists.—*G. A. Emerson* (West Virginia).

1626. Pophal, R. **Zur Psychophysiologie der Spannungserscheinungen in der Handschrift.** (Psychophysiologie of tension phenomena in handwriting.) *Z. angew. Psychol.*, 1940, 60, 129-315.—The present study is an extension of the author's theory of muscle tension in graphology (see 16: 1570). Pressure tension (*Druckspannung*) is distinguished from stiffening tension (*Versteifungsspannung*), a distinction which had heretofore not been made. The first is the tension which exerts pressure on the paper, the second the tension found when finger, wrist, or elbow are cramped. In their extremes, the two tensions are mutually exclusive. Accordingly, analysis shows that the more frequent is intense stiffening, the less frequent is free flowing movement and strong, rhythmic pressure. Average stiffening tension is found together with greatest vitality, whereas both extremes occur more frequently in exceptional personalities, who at the same time lack basic vitality. Over 100 samples of handwritings are included.—*H. L. Ansbacher* (Brown).

1627. Sarason, S., & Rosenzweig, S. **An experimental study of the triadic hypothesis: reaction to frustration, ego-defense, and hypnotizability. II. Thematic apperception approach.** *Character & Pers.*, 1942, 11, 150-165.—Degree of repression was measured by the relative amount of recall of failures and successes in solving jigsaw puzzles, and by a description of feeling responses while taking the puzzle tests. Hypnotizability was estimated by use of the Murray technique or by the Hull test of waking suggestibility. All subjects were given the Thematic Apperception Test. Quantitative and qualitative evidence confirmed the triadic hypothesis that, "hypnotizability as a personality trait is to be found in positive association with impunitiveness as a characteristic type of immediate reaction to frustration."—*M. O. Wilson* (Oklahoma).

[See also abstracts 1446, 1542, 1611, 1683, 1720.]

GENERAL SOCIAL PROCESSES

(incl. Esthetics)

1628. Allport, G. W., & Schmeidler, G. R. **Morale research and its clearing.** *Psychol. Bull.*, 1943, 40, 65-68.—This article traces the history of efforts to establish a clearing house to aid psychologists in the problems of morale. Activities of the Subcommittee on Defense Seminars of the Emergency Committee in Psychology are described up to the committee's discharge in September, 1942. At that time the Society for the Psychological Study of Social Issues reorganized and continued the work of the first committee through a Committee on War Service and Research. Subcommittees have been appointed on: clearance and information, leadership research, morale research, news letter on morale and leadership research, field cooperation, morale measurement, and children in wartime. 43 topics are listed as indicative of the interests of the social psychologists who have corresponded with the committee.—*F. McKinney* (Missouri).

1629. **Army Medical Library. Bibliography of the psychological aspect of war.** (Microfilm.) Washington, D. C.: Photoduplication Service, Army Medical Library, 1942.

1630. Arrington, R. E. **Time sampling in studies of social behavior: a critical review of techniques and results with research suggestions.** *Psychol. Bull.*, 1943, 40, 81-124.—This paper deals with studies using "a method of observing the behavior of individuals or groups under the ordinary conditions of everyday life in which observations are made in a series of short-time periods so distributed as to afford a representative sampling of the behavior under observation." A review of these researches shows little uniformity as to procedure. The two major sections of the report deal with: (1) methodological findings and research suggestions, and (2) behavior findings and research suggestions. The methodological gains are summarized in terms of feasibility of these studies, their reliability, validity, factors affecting sampling procedure, and role of time sampling in scientific study of social development. The two behavior findings that have been tentatively established are: (1) "that the frequency of social activity increases with age during the pre-school years," and (2) "that individuals observed in situations affording ample opportunity for social interaction differ characteristically in frequency of social involvement." A list of 10 findings which lack adequate confirmation is given. The remainder of the article deals with research problems and procedures of normal development and individual variation in frequency and pattern of social participation. Bibliography of 79 titles.—*F. McKinney* (Missouri).

1631. Banerjee, S., & Mitra, S. C. **Studies in aesthetic perception.** *Indian J. Psychol.*, 1942, 17, 94-98.—Eight colors were presented to 112 subjects by the method of paired comparison. The introspections of the subjects were classified according to

Valentine's 4 descriptions (objective aspect, physiological aspect, associative aspect, and character of empathy aspect). Of the 68 introspective reports 35 were of the associative, 28 of the objective, 3 of the empathy, and 2 of the physiological type. Red was preferred; yellow, orange, and violet were least stimulating.—*A. Weider* (New York University).

1632. Bateson, G., & Mead, M. *Balinese character; a photographic analysis*. New York: New York Academy of Sciences, 1942. Pp. xvi + 277. \$3.75.—The authors obtained their material in Bali in 1936-1938 and a 6-weeks period in 1939. In a 48-page introduction Mead summarizes important considerations of the Balinese character to orient the reader for the 100 plates, containing 759 photographs selected from among 28,000 stills. The photographs were taken by Bateson while Mead made verbal notes on the behavior being photographed. Each plate is accompanied by detailed explanatory captions. The plates are presented in the following 10 groupings: villages, agricultural practices, religious and trancerites, industrialization; social organization, physical elevation, respect; learning (visual, kinaesthetic, balance); trance behavior, body surface, hands; orifices of the body (mouth attitudes, eating habits, suckling habits, body products); auto-cosmic play (the baby, genital manipulation, toys, cock fighting); the roles of parents and children, temper tantrums, borrowed babies, trance behavior, witches, fear, sleep; sibling rivalry and roles; stages of male and female child development; and birthday rituals, tooth-filing, marriage, death, funerals, exhumation practices. A 3-page selected bibliography is followed by a glossary and index of native words and personal names.—*M. H. Erickson* (Eloise Hospital).

1633. Bavelas, A. *A method for investigating individual and group ideology*. *Sociometry*, 1942, 5, 371-377.—The author describes and illustrates a method of investigating the content and topology of a person's ideology that will "enable the experimenter to answer the questions (a) what specific behaviors are included in a specified behavior-category, (b) what are the sources of approval and disapproval for these specific behaviors, and (c) in what way are they related to one another." Children in grades 4-8, for example, were asked: "What could a child of your age do at school that would be a good thing to do and someone would praise him?" "Who would praise him?" Then a series of "scold questions" were presented similarly. From grade 4 to 8 there was decreasing mention of doing work assigned and not creating disciplinary problems and increasing mention of excelling or doing a great or noble deed. Graphs present the frequency of teacher, principal, and an individual child as sources of praise or scolding. From grade 4 to 8 the principal becomes a more frequent source and a child, a less frequent source. A method of studying ideologies involving conflicting overlap also is illustrated. Suggestions are made concerning the use of the author's method.—*G. R. Thornton* (Purdue).

1634. Becker, H., & Myers, R. C. *Sacred and secular aspects of human sociation*. *Sociometry*, 1942, 5, 355-370.—This is the 2nd section of a paper previously begun (see 17: 602). The accessible secular society as a constructed type is described. Bars to secularization, arising from the natural environment or from man himself, are listed and illustrated. Since it is difficult to maintain social control in a secularized society, a dictator seeks to isolate his group in order to bring about sacralization. The Hitlerian dictatorship is used to illustrate isolation in preparation for sacralization.—*G. R. Thornton* (Purdue).

1635. Bhattacharyya, H. D. *India's psychological reaction to the war*. *Indian J. Psychol.*, 1941, 16, 85-98.—War as a menace to self-preservation or race preservation is unknown to India. "At no time did England wish to arm India for fear that she may some day turn against them." India does not wish India to lose the war, indeed, she wants England to learn what curtailment of freedom and comfort feels like. "Britain's reversion to the policy of 'Divide and Rule' in order to prevent organized political agitation has seized the Nationalists with dismay, and they welcome the war as an opportunity to force Britain to abandon the communal award so that at some future time communities now at war with each other might compose their political differences and evolve a common nation in India." All schools of political thought regard the war as an opportunity to get something out of England, whether for their own particular group or for India as a whole.—*A. Weider* (New York University).

1636. Brown, S. F., & Hull, H. C. *A study of some social attitudes of a group of 59 stutterers*. *J. Speech Disorders*, 1942, 7, 323-324.—"The results of three . . . tests administered to 59 stutterers in three midwestern speech clinics indicate that the stutterers as a group have inferior speech attitudes as judged by their position on the standardized scale of that test; have had less speech experience, as shown by their compared rating on the scale of 'Speech Experience Inventory'; and rate significantly 'lower' in social adjustment as measured by Part II of the Personal Inventory Schedules, than groups of unselected speakers to whom they were compared."—*C. V. Hudgins* (Clarke School).

1637. Burgess, E. W., & Baumgartner, J. C. *The American family; the problems of family relations facing American youth*. *Probl. Amer. Life*, 1942, No. 7. Pp. 56.—This pamphlet is prepared as a resource unit for teachers of social studies in secondary schools. The first 38 pages are devoted to a summary discussion of the problem of family relations, in terms of the nature of the problem, its analysis, causes, goals to be sought in solution of the problem, and means for bringing about solutions. The first section is concluded with a chapter on teaching resources. The second section, pp. 39-56, consists of teaching aids in dealing with the problem in relation to the pupils' needs.—*D. L. Glick* (Arlington, Va.).

1638. Carhart, R. A speech teacher looks at general semantics. *Quart. J. Speech*, 1942, 28, 332-338.—The "extensional devices" of general semantics may be applied to some speech situations. The application of other concepts from general semantics to the speech field will probably prove fruitful.—W. H. Wilke (New York University).

1639. Dickinson, H. C. The applicability of the methods of natural science to social phenomena. *Sociometry*, 1942, 5, 336-354.—Noting that there is a great gap between methods of thinking about the social and the physical world, and that the physical sciences require exact concepts and rest on a firm foundation of proved facts, the author raises the question: "Are there in the social field facts and generalizations which are comparable to those of the factual sciences?" He then presents a series of postulates and principles to be examined in the light of this question, e.g.: "production equals consumption"; "the creation, conservation and effective use of 'tools' are essential to a civilization of plenty." Part II attempts application and illustration of some of the principles stated in Part I. Part III presents as a challenge the need to develop the science of human society beyond the descriptive level.—G. R. Thornton (Purdue).

1640. Diggs, E., Hanger, E., & Mull, H. K. Morale in the college situation in relation to the morale scale of Rundquist and Sletto. *Amer. J. Psychol.*, 1942, 55, 561-562.—Nine seniors, psychology majors, ranked 30 subjects in each of two groups: (1) high morale students, who held offices and carried out extra obligations, and (2) average morale students, who held no offices and assumed no extra responsibilities. The Rundquist-Sletto scale of personal morale and the D. C. Miller national morale scale were then administered. After 6 weeks the seniors were asked to re-rank the subjects on the basis of the Rundquist-Sletto definition of morale. The findings are: (1) The average morale score of the high group was 51.9, that of the average group, 50.15, with a CR of only .88. The difference favors the average group, since a low score indicates high morale. (2) The rho's between scores and rankings without any definition were $.17 \pm .13$ (high group) and $.14 \pm .18$ (average group); with definitions these became $.22 \pm .12$ and $.24 \pm .12$. (3) Rho between the two morale scores was $.14 \pm .09$. These data are considered critically, and it is suggested that morales, not morale, are indicated.—D. E. Johannsen (Skidmore).

1641. Friedman, P. A second experiment on interviewer bias. *Sociometry*, 1942, 5, 378-381.—The experiment reported by Stanton and Baker (see 16: 4479) was duplicated, except for a few minor details. 100 subjects were shown 12 geometric figures. After one week they were shown cards containing the original figures paired with their mirror images and were asked by interviewers to identify the original figures. Although the interviewers assumed their scoring keys to be correct, actually half of the answers on each key were correct and half

were incorrect. Results are tabulated in terms of percent of correct responses in agreement with and contrary to the bias (i.e. the key) of the interviewer. The difference in favor of responses in agreement with the interviewers' bias was .4%, this difference being statistically not significant. These results are interpreted as not confirming the results reported by Stanton and Baker.—G. R. Thornton (Purdue).

1642. Ghosh, B. C. The way of life. *Indian J. Psychol.*, 1941, 16, 79-83.—The types of Brahminic thought, the orders of Buddhistic thought, the life three-fold of Bertrand Russell, and the id, ego, super-ego constituents of the Freudian system should all be considered in a dynamic way and regarded as phases of human nature appearing on progressive levels. A consideration of life in primitive society suggests that living in a family, man has to learn restraint, practice inhibition, and pay due regard to others he loves. History traces 3 steps of ascent from the life of instinct to the life of the spirit in individual as well as in social life.—A. Weider (New York University).

1643. Ginsburg, S. W. What unemployment does to people; a study in adjustment to crisis. *Amer. J. Psychiat.*, 1942, 99, 439-446.—Criteria used to set up a valid sample of the population in order to study the effect of unemployment on "normal" people are given. Of the cases which met the criteria, not one was found to have had welfare or other agency assistance before the depression. The first reaction to loss of security was essentially one of fear and bewilderment combined with over-compensatory optimism; some few families responded with fear and panic. In their unemployment the families found defeat and a threat to their status in the community, their (modest) ambitions for themselves, and their hopes for their children. The unemployed man found his greatest outlet in assuming feminine responsibilities in the house. The only evidence of protest behavior was found in some cases which withdrew or revolted all the way from their previous religious observances. Cheating investigators in petty ways afforded some slight ego gratification. Work relief challenges the decay of unemployed men.—R. Goldman (Boston Psychopathic Hospital).

1644. Goetsch, W. Staatengründung und Kastenbildung bei Termiten. (The founding of states and formation of castes in termites.) *Naturwissenschaften*, 1941, 29, 1-13.

1645. Halliday, J. L. Dangerous occupation; psychosomatic illness; and morale. *Psychosom. Med.*, 1943, 5, 71-84.—In miners "the basic trends towards self-preservation are constantly being 'tickled' by threats." This stimulation induces a state of chronic emotional tension and results in a higher rate of neurotic affections among miners than among the general British working population. The occupational neurosis rate in general, rose steadily during the period between the two great world wars, with the greatest increase in the younger age group. Mining or any occupation is a subculture, so that the incidence of occupational neurosis may be regarded

as an indication of defective social health, determined by the culture. "The older age groups still had their roots in a tradition which could not longer nourish the younger generation. The happenings in Western civilization between the two great wars may . . . be described . . . in terms . . . of cultural disintegration." Since the present war became a reality, the working population has shown stability. "The peak of the wave of cultural degeneration . . . has now probably been passed." The destruction of houses brought a new sense of elementary values; growth of employment and wage stabilization alleviated frustrating socio-economic factors; rationing created a new sense of equality; the struggle to win the war made life again meaningful. All this holds implications for postwar planning.—*H. L. Ansbacher* (Brown).

1646. **Hanson, H.** A musician's point of view toward emotional expression. *Amer. J. Psychiat.*, 1942, 99, 317-325.—This is a brief review of "a few of the most important developments in the history of musical composition" with comments on "the technics which have contributed to particular types of musical expression. The emotional connotations of music are highly complex in character. They are . . . more powerful than is generally realized." Concrete suggestions for future study are given.—*R. Goldman* (Boston Psychopathic Hospital).

1647. **Jones, A. H.** A method for studying moral judgments—further considerations. *Amer. J. Sociol.*, 1943, 48, 492-497.—The method for studying moral judgments discussed by Cuber and Pell (see 15: 4293) is considered, and several modifications are suggested after the check study made at the University of Pennsylvania. Rank-order correlation of the two series was high; the check series showed a tendency toward greater disapproval of situations presented. The situations were found to be meaningful for the respondents. The sex differences found by Cuber and Pell were confirmed by Jones, who, in addition, found significant differences according to religious affiliation. The situational method of securing moral judgments provides the investigator with an additional instrument.—*D. L. Glick* (Arlington, Va.).

1648. **Jones, V.** The nature of changes in attitudes of college students toward war over an eleven year period. *J. educ. Psychol.*, 1942, 33, 481-494.—An individual's attitude, as expressed with respect to specific items on a scale, appears to be quite independent of his average attitude. Similarly, attitudes toward war within one frame of reference, may, over a period of time, change drastically without corresponding changes in attitudes in other frames of reference. After Pearl Harbor striking changes took place on a few items, while little or no changes took place on others, on scales intended to measure attitude toward war. The sensitive items were found to be worded so that the change was in the frame of reference of defense, safety, and security of home, country, and the democratic way of life.

Items within frames of reference such as the humanitarian, the idealistic, and the economic did not change appreciably. The significance of this finding for the understanding of popular attitudes toward war and for psychological and educational planning is discussed.—*D. G. Ryans* (Cooperative Test Service).

1649. **Kramer, R.** The conceptual status of social disorganization. *Amer. J. Sociol.*, 1943, 48, 466-474.—Social disorganization can be viewed more fruitfully as a process than as a condition. In studying this process there are at least 5 basic approaches, which emphasize economics, cultural lag, semantics, psychiatry, and group breakdown. Only the concept of group breakdown has enough precision and scope to be really adequate. It can be used as a symptom, as a crucial factor, and as a frame of reference. It is important not to confuse these three uses. Social disorganization refers to a dynamic state of interpersonal relations. This can be reduced to the group-individual relationship which, in turn, can best be investigated by the full utilization of psychiatric materials.—*D. L. Glick* (Arlington, Va.).

1650. **Lafleur, L. J.** A reply. *J. comp. Psychol.*, 1943, 35, 97-99.—The writer presents a rejoinder to criticisms of his work by Schneirla (see 17: 243). To Schneirla's objection to anthropomorphic terminology the writer asserts that these terms "apply not only to subjective emotions but also to types of behavior objectively verifiable in man and in many species of animals. There is nothing inappropriate in suggesting . . . that these may include some species of ants." Regarding Schneirla's objection to the consideration of abnormal behavior the writer states: "If Mr. Schneirla assumes that we are reasonably well acquainted with the normal behavior of ants, then abnormal behavior becomes crucial: if he does not assume this, then he is premature in dismissing the behavior in question as unusual." Other specific criticisms of Schneirla are commented upon.—*L. I. O'Kelly* (U. S. Army).

1651. **Lazarsfeld, P. F.** What we really know about daytime serials. New York: Columbia Broadcasting System, 1942. Pp. 14.—This consists of the extended notes of a talk by Lazarsfeld based on a series of studies by H. Herzog (see 16: 4456). The audience, types of serial, and reasons for listening are discussed. Criticisms and suggestions, including the place of daytime serials in the war, are given.—*H. F. Rothe* (Minnesota).

1652. **Ludwig, —.** Die Propaganda als Kriegsmittel. (Propaganda as an instrument of war.) *Milit.-Wochenbl.*, 1942, July 31.

1653. **MacIntosh, A.** Differential effect of the status of the competing group upon the levels of aspiration. *Amer. J. Psychol.*, 1942, 55, 546-554.—The method of Preston and Bayton (see 16: 521) was used with 60 white subjects, who were told the hypothetical scores of Negroes. The results agree with those obtained by Preston and Bayton in showing a tendency to place actual estimates closer to maximum than to least estimates. The subjects

tended to raise the actual and maximum estimates and to hold the least estimate constant when told that they were doing as well as Negroes, which is the converse of what Preston and Bayton found when Negroes were told that they were doing as well as whites. The effect of this social variable was present in the cancellation and additions tasks, but not in the symbols-digits task.—*D. E. Johannsen* (Skidmore).

1654. Mass-Observation. The pub and the people. London: Victor Gollancz, Ltd., 1943. Pp. 350. 16s.—This book describes detailed observations of behavior and recorded conversations made over a period of about two years in the pubs of 'Worktown,' a town of 180,000 inhabitants in the north of England. The observations were made by Mass-Observation's team of investigators, under the direction of T. Harrison. They were made with no specific purpose except to act as a social record. The main conclusion is that the pub is an institution of essential importance in working class life, where the working man can relax and can enter spontaneous social groupings and relationships with his fellows of a satisfactory nature.—*M. D. Vernon* (Cambridge).

1655. McCord, F. A blue-print for total morale. *Character & Pers.*, 1942, 11, 89-107.—In order to achieve in each individual the zeal, hope, confidence in self, and confidence in the outcome of the future needed to build a total morale, it is necessary to work for the adjustment of the whole personality. The needs of the id must be satisfied by removal of threats to the production and distribution of food, comforts, and pleasures. The ego must be reassured in its demand for knowledge and techniques for adjustment to the outside world through continued efficiency in the service of such institutions as science, technology, and the schools. The superego must be relieved of anxiety by the effective functioning of law, religion, and government. Especially must it be relieved of any tensions developing from a sense of guilt as a result of our participation in the war.—*M. O. Wilson* (Oklahoma).

1656. Mead, M. Dietary patterns and food habits. *J. Amer. diet. Ass.*, 1943, 19, 1-5.—The dynamics of American dietary patterns are formulated with the aid of comparative anthropology techniques. Experimental psychology has also given the means with which research could yield information on the food habits of youngsters. Dietitians must become aware of the findings of psychosomatic medicine on gastro-intestinal diseases, anorexia nervosa, and the background of asthma, which offer a basis for acceptance and rejection of food. Other psychological forces at play are: price, arrangement of foods, taste value, color appeal, and influences within the personality. "If we are to establish a dietary pattern good enough to carry us through the war period of shortages and alternatives with the accompanying anxieties and strains, a pattern which will survive after the war, it is necessary to shift the onus from the eater to the planner."—*A. Weider* (New York University).

1657. Minski, L. Psychological reactions to prolonged inadequate heating. *Med. Pr.*, 1942, 208, 44.—The possible effects on morale of inadequate heating, due to fuel rationing, are described.—*T. G. Andrews* (Barnard).

1658. Montagu, M. F. A. The creative power of ethnic mixture. *Psychiatry*, 1942, 5, 523-536.—The author summarizes and discusses the literature on human hybridization and ethnic mixtures and concludes that such mixtures lead, on the whole, to effects advantageous to the offspring and to the group, that harmful effects and physical disharmonies of various alleged kinds are of the greatest rarity, that degeneracies do not occur, and that there is an actual biological gain. Human race problems are not biological problems, and race crossing is at the most a social problem. 44-item footnote bibliography.—*M. H. Erickson* (Eloise Hospital).

1659. Mosier, C. I. Evaluating rural housing; the development of the Florida Housing Inventory and the Index of Housing Adequacy. Gainesville: University of Florida, 1942. Pp. 88.—Details of the construction and standardization of a housing inventory and a housing index are presented. Tabulations are based on completed schedules of 103 items for 715 houses in 6 Florida communities. A summary of the initial measurement program of this study has previously been presented (see 16: 3796). Weights are adjusted for 85 relevant items in the index "so that each item would best measure whatever was measured by the scale as a whole." The analysis of housing attitudes proceeds from a comparison of the changes the occupant thinks are needed in the house with those indicated as needed by an objective evaluation of the completed inventory.—*H. A. Gibbard* (Brown).

1660. Popenoe, P. Marriage, before and after. New York: Willfred Funk, 1943. Pp. xiv + 246. \$2.00.—This book is planned as a guide-book for the achievement of success in marriage. The entire subject of love and marriage is discussed in the way that has been found most effective in actual marriage-counseling at the American Institute of Human Relations, of which the author is general director. Suggestions for specific action are offered for many special problems, and further practical help is given in the form of several self-tests and rating scales that may be applied to fiancé or mate.—*D. Riggs* (Brown).

1661. Prenant, M. Raza y racismo. (Race and racism.) (Trans. by M. Martínez Báez.) México, D. F.: Fondo de Cultura Económica, [1941?]. Pp. 176. \$2.00.—[Abstracted review; original not seen.] This is a translation of a French study of the problem of raciality in relation to present-day politics and social life. Latin-Americans are reminded that as "hybrids" they are inferior according to the German view.—*H. D. Spoerl* (American International College).

1662. Remmers, H. H. Attitudes toward Germans, Japanese, Jews, and Nazis as affected by the war. *Sch. & Soc.*, 1943, 57, 138-140.—Attitudes in

1935 and 1942 are compared. There is little change as regards Germans or Jews; but an almost neutral attitude to Japanese and Nazis in 1937 has been changed to a strongly negative one in 1942. In both years the average attitudes to Germans and Nazis are widely separated. Variability in attitude to Nazis and Japanese has decreased, while to Germans and Jews it has increased. In other studies such increased spread has been attributed to increased knowledge and discussion of the subject. Correlations between attitudes, while not high, are all positive, suggesting a general tolerance factor. The Purdue students with whom these results were obtained, may well be regarded as a sample of the general population.—*M. Lee* (Chicago, Ill.).

1663. Riezler, K. Comment on the social psychology of shame. *Amer. J. Sociol.*, 1943, 48, 457-465.—Shame is neither a purely social nor a merely sexual phenomenon. Its universality points to a fundamental pattern of human life. Shame has a function in a process of formation which is both individual and social. This functional meaning can be constant though the contents of shame vary and change. An analysis of the connotations of the words for shame in different languages suggests the relations between shame and awe. *Pudenda* and *veneranda* are interrelated.—*D. L. Glick* (Arlington, Va.).

1664. Russell, R. W. The spontaneous and instructed drawings of Zuni children. *J. comp. Psychol.*, 1943, 35, 11-15.—The author administered the Goodenough Draw-a-Man test to 41 Zuni children between the ages of 5 and 10 years. The tests were scored independently by 4 trained persons, and the average of the 4 scores was taken. The mean IQ for the 27 girls was 105.61 ± 17.72 ; the mean IQ of the 14 boys was 104.50 ± 15.13 . These results indicate no inferiority of the Zuni to white norms. Spontaneous drawings were also collected from this group, but due to the masking effect of specific cultural and experiential factors (as the tribal restrictions against drawing men) age differences and developmental trends could not be discerned. "It is apparent that in order to uncover developmental trends in behavior such as that reported in the present study it is often necessary to remove cultural and experiential influences by some such procedure as that involved in the 'instructed' drawings."—*L. I. O'Kelly* (U. S. Army).

1665. Sastry, N. S. N. Assessment of the beauty-value for aesthetic stimuli. *Indian J. Psychol.*, 1942, 17, 65-73.—Ten colored reproductions of paintings and 7 selections of music were used as stimuli to 44 subjects. The subjects were asked (1) to rate the degree of pleasantness of each stimulus on a 10-point scale, (2) to put the stimuli in a rank order of aesthetic significance. The 3 measures derived from this procedure (frequency of affective judgments, average affective score, and rank given by the group as a whole) correlated higher than .90 in all instances. The stimuli are aesthetically significant as indicated by their ranks.—*A. Weider* (New York University).

1666. Schwartz, L. A. [Chairman.] Psychoanalytic orientation in family case work; round table, 1942. *Amer. J. Orthopsychiat.*, 1943, 13, 1-33.—R. Waelder opened the discussion by considering to what extent psychotherapeutic activities, the direct treatment of emotional needs, can be integrated into the whole of social case work. W. Healy offered an estimate of how valuable partial psychoanalytic procedures and interpretations from the psychoanalytic standpoint are in relation to accomplishment in family case work. C. Towle discussed the integration of psychoanalytic orientation into the function and practice of social case work, and the role of the trained worker in therapeutic function with the psychiatrist. G. Mohr spoke on the position of the analyst who works with children, in relation to members of the child's family and to the worker involved in family case work. M. MacDonald evaluated the role of the psychoanalytically oriented psychiatrist in family case work. H. Lippman commented on psychoanalytic orientation in a child guidance clinic. The discussion from the floor was lead by Madeline Moore.—*R. E. Perl* (Jewish Board of Guardians).

1667. Thorndike, E. L. The causes of inter-state migration. *Sociometry*, 1942, 5, 321-335.—On the basis of census data the author has calculated inter-state migration ratios (IM) for the 1128 pairs of states; these ratios are of the form: Born in B, living in A/Born in A, living in B. Samples of these ratios are presented. He has also calculated 18 measures of the difference between pairs of states in such characteristics as longitude west, cityness, manufacturingness, general goodness of life, per capita income, density of population (reversed). Correlations between IM and each of the 18 measures are presented for native whites and native colored for the years 1870, 1900, and 1930. Some of the inter-correlations of the 18 measures for the various groups also are presented. These correlations are examined for evidence as to the causation of differences in attractiveness of states. "It is remarkable that five-sixths of the relative attractiveness of one state over another for whites in 1930 should be determined by a half dozen objective features, [longitude west, area, density of population in 1920, ruralness of 1900, manufacturingness, and general goodness and personal qualities of 1900], and that even fewer features [longitude west, general goodness, and per capita income] account for over fifteen-sixteenths of it for Negroes."—*G. R. Thornton* (Purdue).

1668. Willcock, H. D. Mass-Observation. *Amer. J. Sociol.*, 1943, 48, 445-456.—Mass-Observation (abbreviated as M.-O.) is a continuing study of all England's social institutions. Volunteer field workers record their observations of important events and keep detailed diaries on the war as they experience it. Two urban areas are constantly under survey; rural community studies are made periodically. Book-length reports on pubs, politics, religion, and the human side of industry have been published. Trained investigators make separate

continuing studies of particular institutions. Record of the war's effects on ordinary peacetime habits has been kept. A library including important journals as well as many minor leaflets and bulletins published by assorted social groups has been built. Opinion-sampling methods are used, but the techniques of observation and subjective accounts are being more and more depended upon for the recording of social change in Britain at the deeper, more significant levels.—*D. L. Glick* (Arlington, Va.).

1669. **Wright, Q.** *A study of war*. 2 vols. Chicago: University of Chicago Press, 1942. Pp. xxiii + 1-678; xvii + 681-1552. \$15.00.—[Abstracted review; original not seen.] Volume I is devoted to the history, Volume II, to the analysis of war. Both volumes contain extended appendixes. Two chapters in Volume I present the objects of the study, its setup, and organization. A preliminary definition of war is given as a "violent contact of distinct but similar entities," and warlike behavior is divided into that "pertaining to animals, to primitive man, to civilized man, and to man using modern technology." Asserting that the "psychological causes of war lie ultimately in the characteristics of protoplasm," Wright maintains that the study of animal warfare would be more helpful toward understanding the organic bases and social tendencies of war than the study of such a complex form as man. He concludes that fundamental drives exist directed toward food, sex, dominance, self-preservation, home territory, activity, independence, and society. Succeeding chapters deal with primitive, historic, and modern warfare, the last based upon an analysis of modern civilization. In Volume II a more "refined definition" of war is given as "a simultaneous conflict of armed forces, popular feelings, jural dogmas, and national cultures so nearly equal as to lead to an intensification of each." Control of war is seen as possible only through genuine world-wide government.—*D. L. Glick* (Arlington, Va.).

[See also abstracts 1425, 1593, 1692, 1711, 1719, 1731, 1739, 1756, 1760.]

CRIME AND DELINQUENCY

1670. **Baldie, A.** *Treatment of delinquency*. *Med. Pr.*, 1941, 206, 240-243.—The author discusses the social, legal, and medical usage of the term delinquent. The etiology factors are discussed under the headings of the delinquent, his environment, and the laws, conventions, customs, and taboos of his social group. Constitutional types and "life styles" are described, and procedures for case investigation are outlined.—*T. G. Andrews* (Barnard).

1671. **Burns, C. L. C.** *Juvenile delinquency*. *Med. Pr.*, 1942, 208, 248-250.—Pointing out that juvenile delinquency most often takes the form of boys who steal, the author discusses the complexity of the causal factors and factors in treatment. Among the causal factors discussed are defective discipline, intelligence, temperament, and emotions.

In respect to treatment it is indicated that delinquency should be considered as a symptom of a deeper maladjustment rather than as an entity in itself.—*T. G. Andrews* (Barnard).

1672. **Carr-Saunders, A. M., Mannheim, H., & Rhodes, E. C.** *Young offenders; an enquiry into juvenile delinquency*. Cambridge, New York: Cambridge University Press, Macmillan, 1942. Pp. x + 168. \$1.75.—This is a report of an inquiry into the social and environmental circumstances of approximately 2000 male delinquents and a similar number of controls all living in London, Manchester, Leeds, Sheffield, Hull, Nottingham, and Cardiff. No attempt was made to investigate psychological characteristics or collect medical data. Delinquents were chosen according to the legal criteria of delinquency. A real increase in the delinquency rate up to 1938 was noted. Limitations of the method of using controls are set out. 80% of the controls and about 60% of the delinquents came from normal family environments. A close association between abnormal homes and family atmosphere and delinquency was established. The controls had better school records, attended church more regularly, and had healthier recreational interests than the delinquents. The fallacy of the all or none features of the findings is stressed, along with the necessity for observing that statistical researches in the field of delinquency should be regularly and systematically conducted.—*P. S. de Q. Cabot* (Simmons).

1673. **Gájardo, C., S.** *Delincuencia infantil*. (Juvenile delinquency.) Santiago de Chile: Dirección General de Prisiones, 1940. Pp. 293.

1674. **García Miranda, A.** *La biotipología humana; sus fundamentos, doctrina, importancia jurídica-social y su aplicación práctica, especialmente en criminología*. (Human biotypology; its basis, theory, juridical and social importance, and its practical application, especially in criminology.) Santiago de Chile: Dirección General de Prisiones, 1941. Pp. 204.

1675. **Gregor, A.** *Die psychische Konstitution von Minderjährigen mit leichter Kriminalität*. (The psychic constitution of adolescents with minor offenses.) *Allg. Z. Psychiat.*, 1942, 120, Nos. 1-2.—[Abstracted review; original not seen.] 324 youths between the ages of 18 and 21 who had been given sentences of 3-6 months for minor offenses were divided into: (1) those without previous criminal record and not classed as neglected, (2) those whose offenses seemed to be the direct result of neglect but who did not have a criminal background, and (3) those with criminal background. A direct association was found between the degree of psychological abnormality of the young criminal and the type of home background.—*F. L. Goodenough* (Minnesota).

1676. **Meersohn Schijman, A.** *Factores sociales del delito en Chile*. (Social factors of crime in Chile.) Santiago de Chile: Leblanc, Stanley y Urzúa, 1940. Pp. 100.

1677. Nutt, A. S. Wartime influences on juvenile delinquency. *Child Welf. Leag. Amer. Bull.*, 1942, 21, 1-4; 11-12.

1678. Sellin, T., & Busey, P. R. Crime; the causes and extent of criminal behavior, its prevention and treatment. *Probl. Amer. Life*, 1942, No. 9. Pp. 64.—Topics briefly reviewed include: the recorded amount of crime; its geography; the relationship between crime and race, age, sex, residence, family morale, and economic status; methods and agencies of crime prevention and the treatment of offenders; teaching resources including a listing of basic materials, recent books, official and unofficial sources of information, periodicals, and films. Teaching aids are discussed, and a selected bibliography is presented.—*P. S. de Q. Cabot* (Simmons).

1679. Shanas, E., & Dunning, C. E. Recreation and delinquency; a study of five selected Chicago communities, made for the Chicago Recreation Commission. Chicago: Chicago Recreation Commission, 1942. Pp. xxi + 284. \$1.50.—This is a factual analysis of data collected during 1938-39 on the recreational activities of 15,000 boys and 8000 girls between the ages of 10 and 17. They were divided into three groups: delinquents having court records, non-delinquents, and unofficial delinquents. Findings include the following: (1) Boys over 14 years of age did not participate in recreational programs in as large numbers as did younger boys. (2) Proportionately more non-delinquents than delinquents took part in supervised recreation. (3) Delinquents preferred competitive sports and non-supervised activities. (4) Delinquents attended movies more often than the non-delinquents. (5) All boys and girls spent twice as much time at the movies as in supervised recreation. (6) In 4 neighborhoods with higher delinquency rates all children favored radio crime and mystery stories, while comedians and variety hours were preferred by boys and girls living in an area with a lower delinquency rate. (7) Participation in supervised recreation reduced delinquency as measured by percentage decreases of recidivism. On the basis of the findings recommendations are made for increased recreational facilities.—*P. S. de Q. Cabot* (Simmons).

1680. Staub, H. A runaway from home. *Psychoanal. Quart.*, 1943, 12, 1-22.—"The technique of dealing with juvenile delinquents requires a preparatory period in which the analyst has to be active in order (a) to gain confidence for establishing a strong, positive transference; (b) to drain off the excess of anxiety; (c) to fortify the badly damaged self-confidence, and permit the controlling and restraining forces of the ego to operate. This accomplished, the usual technique of psychoanalysis is then employed. Society's present method of mishandling these cases reflects the total psychological blindness and prejudice which characterize its approach to the treatment of all criminal offenders. Boys are pursued by the police, . . . thrown into jail with drunkards and habitual criminals, then exposed to the strange ritual of court procedure. . . . The

chief accomplishment of the costly machinery of law enforcement is that it becomes an efficient mill which grinds out more and more criminals."—*M. H. Erickson* (Eloise Hospital).

[See also abstract 1725.]

INDUSTRIAL AND PERSONNEL PROBLEMS

1681. [Anon.] Supervising the woman war worker. Deep River, Conn.: National Foreman's Institute, 1942. Pp. 34. \$0.50.—Fourteen pages of this pamphlet are given over to a listing of industrial jobs for which women can be trained. The jobs which women now do, cover only one of these pages. Foremen who will face the new experience of training and supervising women workers are advised that although women may flare up more quickly than men, they just as quickly get over a peeve; and, if fairly and considerately treated, they can be counted on to become more careful, more patient, and quite as skilful workers. Overstaffing of departments and a visiting nurse program are suggested as effective methods of handling the problem of absenteeism which rises as women enter industry in greater numbers.—*M. R. Sheehan* (Hunter).

1682. [Anon.] The Army personnel system. *Adj. Gen. Sch. Lect. Ser.*, 1942, No. 1 (rev.). Pp. 11.—This is a brief description of the Army personnel system. "Fundamentally, the problem of personnel placement in the Army required the establishment of an employment service for the Army which must maintain control over the individual from his first contact with the service until ten years after the termination of such service." Policies are developed by the War Department General Staff; procedures designed for individual classification and reclassification are developed and controlled by the Personnel Division of the Staff, Services of Supply; procedures are employed, in order, through the Selective Service Board, Induction Stations, Recruit Replacement Centers, Service Command Headquarters, Replacement Training Centers, and Command. A complete, accurate, and up-to-date record must be maintained for successful operation of the system. "The Company Commander . . . becomes the ultimate personnel manager of the Army." "It is he whom the Army Personnel System is designed to serve."—*R. A. Brotemarkle* (Pennsylvania).

1683. [Anon.] Psychology for the fighting man; leadership. *Infantry J.*, 1943, 52, No. 2, 8-13.—This article, the second of a series (see 17: 1301), is subdivided by headings entitled: discipline, learning obedience, the leader, what soldiers think of leaders, the role of the soldier, complaints, selection of leaders, and leadership can be learned. What soldiers think of leaders was studied by interviewing thousands of soldiers. The study showed that the quality of leadership is the most important single determiner of morale and performance. The soldiers mentioned 77 features of army life as definitely associated with morale, and, of the 20 most closely related to morale, 16 had to do with officer-man

relations. In the order of their association with good leadership in the minds of enlisted men are the following characteristics: (1) competence, (2) interest in the soldiers' welfare, (3) promptness in making decisions, (4) ability to instruct, (5) good judgment, (6) absence of undue display of authority, (7) tendency to commend good work, (8) physical strength and build, (9) "good education," "sense of humor," and "guts," (10) impartiality, (11) industry, and (12) ability to give clear-cut understandable orders. Regarding selection of leaders reliance must be placed upon giving leadership a chance to emerge, and then having competent men judge whether it has appeared.—*N. R. Barillett* (Brown).

1684. **Army Medical Library. Bibliography of aviation tests.** (Microfilm.) Washington, D. C.: Photoduplication Service, Army Medical Library, 1942.

1685. **Baker, W. A. Further studies of learning aptitude in pilots. B: Prediction of ground school aptitude.** *Trans. Kans. Acad. Sci.*, 1942, 45, 287-289.—Intelligence, college grades, the total number of hours credit in such background courses as physics and mathematics, or several combinations of such measures were found not to be significantly related to Civil Aeronautics Administration final examination scores in ground school courses. Possible explanations for this lack of relationship are suggested.—*W. A. Varvel* (Texas A. & M.).

1686. **Baumgarten, F. Le travail de l'homme.** (Man's work.) (Trans. from the German by D. Ribone.) Neuchâtel: Baconnière, [1942?]. Pp. 85. Frs. 3.—See 15: 433.—*H. L. Ansbacher* (Brown).

1687. **Bellows, R. M., & Richardson, M. W. Training in military personnel psychology—minimum requirements for college courses.** *Psychol. Bull.*, 1943, 40, 39-47.—These are suggestions to civilian university psychology instructors regarding the orientation of their courses so that they will have value for the future army officer in personnel administration. Job analyses of the Army personnel technician and personnel consultant are presented. A statement of the content of 7 courses frequently offered by psychology departments follows. A plea is made to plan these courses so that they will include the fundamental principles of personnel work such as test and measurement rationale. In addition to traditional courses, the authors request training of future officers in (1) occupations and occupational psychology, (2) criterion development and appraisal, and (3) the practical use of Army classification tools. Generally available Army regulations and training manuals are listed as essential sources of occupational and military personnel information.—*F. McKinney* (Missouri).

1688. **Brainerd, A. A., & Massey, R. A. Designing for three-dimensional seeing.** *Illum. Engng. N. Y.*, 1942, 37, 747-749.—The visibility of industrial machines can be improved by spot lighting the working area with light colored paints of contrasting hues.—*G. W. Knox* (U. S. Naval Reserve).

1689. **Breeding, H. A. Observations of night sky brightness and lumen with special reference to coastal dim-out requirements.** *Illum. Engng. N. Y.*, 1942, 37, 830-834.—Data are presented from laboratory and field (at sea) experimentation concerning ship visibility against a variety of background illuminations. The field studies included the effects of fog, rain, snow, moonlight, starlight, and shore lights on ship visibility, under varying distances and heights of observation.—*G. W. Knox* (U. S. Naval Reserve).

1690. **Carmichael, L., O'Brien, J. C., & others. National Roster of Scientific and Specialized Personnel.** Washington, D. C.: U. S. Government Printing Office, 1942. Pp. 47. 10¢.—The organization and work of the Roster, from its inception through June 1942, are described. The report contains historical data and discusses methods of administration (collecting data, coding, etc.) and the use of the acquired information by various agencies. Some data are included in the appendices.—*H. F. Rothe* (Minnesota).

1691. **Diringshofen, H. v. Medical guide for flying personnel.** Toronto: University of Toronto Press, 1940. Pp. 102. \$1.00.—This is a translation of the German text (see 15: 2740) by V. E. Henderson. The following topics are discussed: (1) the effects of decreased atmospheric pressure, oxygen lack, cold, acceleration, and centrifugal force on the flier; (2) the importance of the sense organs for the flier; (3) sensory illusions in blind flying; (4) the effects of noise and vibration and the causes of air sickness; (5) recreation and hygiene for flying personnel; (6) medical examination of flying personnel; and (7) the relationship between flier and medical officer.—*A. Chapanis* (Wright Field).

1692. **Evans, F. Some factors affecting military morale.** *J. R. unit. Serv. Inst.*, 1942, August.

1693. **Ferree, C. E., & Rand, G. Wartime and blackout lighting in relation to the eye.** *Illum. Engng. N. Y.*, 1942, 37, 579-594.—See 16: 4974.—*G. W. Knox* (U. S. Naval Reserve).

1694. **Gordon, P. H. Selection testing of recruits, or from coupon to quartermaster.** *Roy. Engrs' J.*, 1942, Sept.

1695. **Kirkpatrick, F. H. Common sense about tests.** *Person. J.*, 1943, 21, 277-281.—The frequent errors made in using tests for selection of employees have deterred some personnel managers from using tests. These errors include (1) taking over completely test batteries which have been used successfully in other organizations, (2) thinking that anyone can administer tests, (3) not interpreting test results in the light of the whole situation, and (4) expecting too much from tests. Tests may make definite contributions, however, as (1) a check on educational background, (2) a check on reported occupational experience, (3) a means of comparing the applicant with workers already employed, (4) an indication of particular abilities, and (5) offering some clues to temperament and personality characteristics.—*M. B. Mitchell* (U. S. Naval Reserve).

1696. Locke, N. **Employee ratings.** *Person. J.*, 1943, 21, 282-288.—The service rating scale for employees may be used when considering salary advancements, promotions, and lay-offs. It may also be used to motivate the employee and reveal the effectiveness of supervision. A job analysis is necessary before a good rating scale can be made. The rating scales may be of various types such as: yes or no, numerical, qualitative, or graphic. The author recommends an odd number of points on the scale so that a normal distribution may be obtained.—*M. B. Mitchell* (U. S. Naval Reserve).

1697. Matheny, W. G. **Further studies of learning aptitude in pilots. A: Prediction of flying aptitude.** *Trans. Kans. Acad. Sci.*, 1942, 45, 285-286.—29 applicants in a Civil Aeronautics Administration flight course were selected by a test battery which considered intelligence, insight, and work load (see 16: 2030). The low correlation of $.134 \pm .015$ between the test results and the ratings later assigned by the flight operator and flight examiner was attributed to the homogeneity of the group, to a ceiling effect, and to a motivation variant.—*W. A. Varvel* (Texas A. & M.).

1698. McPeak, C. F. **Help workers to the right job.** *Person. J.*, 1943, 21, 289-294.—Workers who are maladjusted are not efficient in using their skills. It is to the advantage of both, employees and management, to see that the worker has his needs for affection, independence, security, social approval, and self-esteem satisfied in order to avoid tensions which will interfere with his working efficiency.—*M. B. Mitchell* (U. S. Naval Reserve).

1699. Mitchell, H. D. **Aircrew selection.** *Amer. J. Psychiat.*, 1942, 99, 354-357.—During the early years of aircrew training, 50% of the trainees suffered from a neurosis and 90% of the accidents to the graduate pilots were due to defects within the pilot. To-day, a personality study is made of each prospective aircrew member. The details and demands upon the individual in each job determine the position for which the trainee's ability, equipment, and personality fit him.—*R. Goldman* (Boston Psychopathic Hospital).

1700. Roper, V. J. **Motor vehicle blackout lighting.** *Illum. Engng. N. Y.*, 1942, 37, 835-838.—The effects of various colored vehicle lighting are discussed in regard to the visual threshold of an observer located on the ground and an observer located at various altitudes. The Purkinje effect has a decided protective advantage for the motorist, when red light is used in preference to blue light. At threshold intensities, blue light can be detected by the aviator in a relatively large peripheral region, while he must look more directly at the red light in order to detect it. One disadvantage of red light is a narrowing of the visual field of the motorist which increases the probability of accidents.—*G. W. Knox* (U. S. Naval Reserve).

1701. Schultz, R. S. **Wartime supervision of workers.** New York: Harpers, 1943. Pp. 206. \$2.25.—This book reports the results of a nation-

wide survey on human factors in production, conducted among industrial executives and foremen. The first part of the book covers the subject of the foreman and his qualifications. The second part deals with 100 statements on vital human problems in production. Each of them is phrased so that it may be answered either "true" or "false." The chapter headings in this part are: building morale, fitting the worker to the job, avoiding accidents in war industry, increasing production by better work habits, using the interests and energies of workers for production, and training workers. Each chapter begins with a set of statements, deals with these statements, and presents the results in industry. The material has been classified for use in training foremen. In the appendix, the statistical tabulation on "Personal information on supervisory personnel in a major war industry" covers age, birthplace, education, home life, economic status, physical condition, and so forth.—*R. S. Schultz* (Methods for Industrial Relations, Inc.).

1702. **Staff of the Adjutant General's Office. Personnel research in the Army: I. Background and organization.** *Psychol. Bull.*, 1943, 40, 129-135.—This article surveys the history, organization, and field of responsibility of the Personnel Research Section of the Classification and Enlisted Replacement Branch, The Adjutant General's Office, War Department. The last aspect of the article includes a chart of the Personnel Research Section and its subsections listing specific duties of these departments and their personnel. A brief statement is made of the sum of procedures that have been developed.—*F. McKinney* (Missouri).

1703. Summers, J. A. **Protection against sabotage.** *Illum. Engng. N. Y.*, 1942, 37, 729-737.—The importance of dark adaptation before night guard duty is emphasized. Even though illumination is high, lack of color and intensity contrast between the intruder and his background may allow him to pass undetected. Proper painting of the background at crucial locations may bring about the required contrast effect. In addition, the guard's line of fixation, alertness, and state of fatigue may determine whether or not an intruder is perceived.—*G. W. Knox* (U. S. Naval Reserve).

1704. Tiffin, J., & Kuhn, H. S. **Color discrimination in industry.** *Trans. Amer. Acad. Ophthal. Otolaryng.*, 1942, 47, 165-167.—Abstract.

[See also abstracts 1469, 1480, 1528, 1579, 1592, 1602, 1614.]

EDUCATIONAL PSYCHOLOGY

(incl. Vocational Guidance)

1705. Allers, R. **Some special problems of character education.** *Cath. educ. Rev.*, 1943, 41, 20-31.—Two problems common to "problem teachers" are the fallacy of background and the fallacy of pessimism. The first consists of allowing one's opinion of the child to be influenced by what is known of his background; the second consists of

assuming that evil actions are always indicative of an evil disposition. These errors are discussed in detail, and it is pointed out that they lead to unfair and psychologically unsound practices in handling children, unnecessary referrals to clinics, unwarranted punishment, and similar behavior.—G. S. Speer (Central YMCA College).

1706. Angiolillo, P. F. French for the feeble-minded: an experiment. *Mod. Lang. J.*, 1942, 26, 266-271.—See *Child Developm. Abstr.* 16: 879.

1707. Benedict, M. A reading clinic at a teachers' college. *Cath. Schs J.*, 1943, 43, 37-39.—The author describes the establishment of a reading clinic, the source of referrals, age range and grade level of those in school, general procedures used, and treatment of referrals. There are 9 members of the staff, including a psychiatrist, psychologist, and speech pathologist.—G. S. Speer (Central YMCA College).

1708. Briggs, L. The Thurstone Vocational Interest Schedule and students' actual vocational choices. *Trans. Kans. Acad. Sci.*, 1942, 45, 272-273.—Little significant agreement (the average agreement was 9% above chance) was found between the highest ranking Thurstone Vocational Interest scores and expressed vocational choices of 204 college freshmen. The amount of agreement was higher for immediate temporary choices than for permanent choices, and was higher for boys than for girls.—W. A. Varvel (Texas A. & M.).

1709. Carper, D. Seeing numbers as groups in primary-grade arithmetic. *Elem. Sch. J.*, 1942, 43, 166-170.—Experiment has shown superiority of the grouping over the counting process in first-grade children. In constructing materials to encourage grouping in arithmetic, more attention must be given to "the factors of perceptual organization (imbedding, form of units and pattern). The choice of materials and activities to facilitate grouping can now be made on an objective basis."—S. S. Sargent (Barnard).

1710. Cronbach, L. J. An analysis of techniques for diagnostic vocabulary testing. *J. educ. Res.*, 1942, 36, 206-217.—The literature on diagnostic vocabulary testing is reviewed. Types of word knowledge are described, and methods of testing them are evaluated. It is concluded that with the exception of the interview and certain tests using pictures more valid instruments than are now available are required. Bibliography of 21 titles.—M. Murphy (Pennsylvania).

1711. Cuthbert, M. V. Education and marginality; a study of the Negro woman college graduate. New York: Diss., Columbia University, 1942. Pp. xviii + 167.—A questionnaire containing 112 items pertaining to occupational and personal problems was sent to 172 selected Negro women college graduates. Responses are interpreted in terms of cultural and racial conflict, with emphasis on the ambiguous status of the educated Negro in present American society.—S. B. Williams (U. S. Naval Reserve).

1712. Dressel, P. L. Liberal arts students advised to withdraw. *J. higher Educ.*, 1943, 14, 43-45.—During 1936-37 171 students in the Liberal Arts Division at Michigan State College whose records had fallen below a C average were advised to withdraw. This intermediate action between retention and dropping was studied in the light of the records made by the 81 students who did not accept the advice. 5 were dropped later, 27 later accepted the advice, 5 left on second advice to withdraw, 11 left school after clearing their records, 3 remained in in school and will graduate, 21 graduated. These latter 35 cases contain all the evidence in favor of continuing such technique. In spite of the extra burden of work and the fact that some who accept the advice immediately would probably do better than some who do not, the college has decided to continue the use of this technique.—R. A. Brotemarkle (Pennsylvania).

1713. Edgerton, H. A., & Britt, S. H. The first annual science talent search. *Amer. Scientist*, 1943, 31, 55-68.—This search was begun in the spring of 1942 by Science Service to discover scientific talent among high school students. College scholarships (4-year scholarships for the 2 top winners and 1-year scholarships for 18 additional winners) and trips were the rewards for the successful contestants among 3,175. This search is the first step in making available potential scientific aptitude, and the sponsors with this in mind hope to include a 10-year follow-up, which will indicate the real validity of the method used. The technique used can be described as that of "successive hurdles," which means that all contestants were exposed to the first hurdle and a lesser number to each of the following 5 hurdles until only the winners survived. Successive hurdles were applied in decreasing order of validity and were set up as follows: scientific aptitude examination, high school record, score on recommendations furnished by high school teachers, rating on the essay submitted, personal interviews, and social attitudes test. Statistical precautions were applied in ranking, and the reliability of judges' decisions was secured by intercorrelations.—L. J. Lennon (U. S. Army).

1714. Eells, W. C. Periodicals read by junior college students. *Libr. Quart.*, 1942, 12, 474-485.—See *Educ. Abstr.* 7: 1493.

1715. Feder, D. D., & Wright, M. E. Some differential effects of motivation upon achievement and insight in college physics. *J. educ. Res.*, 1942, 36, 185-191.—Scores on a physics aptitude test had higher predictive value for physics achievement than scores on a general college aptitude test. Students taking first year physics as part of the science requirement in the liberal arts curriculum though slightly superior in ability were slightly poorer in achievement than students majoring in a science. Those taking the course as a prerequisite for admission to the colleges of medicine or dentistry were slightly superior in achievement to both of the other groups. In degree of insight into the possible

contributions of physics to further work and to everyday life the science majors were superior.—*M. Murphy* (Pennsylvania).

1716. **Gaw, E. A.** *Case-study techniques.* *J. higher Educ.*, 1943, 14, 37-40; 58.—Principles for preparing records for use in the office of the dean of women include (1) self-study on part of counselor to be certain of detached sympathetic observation, (2) centralization of records available in institution, (3) development of cumulative records containing environmental background and biological equipment of student, (4) collection of anecdotal records in which descriptive material is divorced from inferences, (5) use of all available autobiographical material, (6) record so organized as to guarantee ready access to all vital, immediately significant, general or specific information.—*R. A. Brotmarkle* (Pennsylvania).

1717. **Goldstein, H., & Justman, J.** *A classroom approach to the improvement of reading rate of college students.* *J. educ. Psychol.*, 1942, 33, 506-516.—Two groups of 14 and 30 college students served as subjects in a study which showed that reading rate may be improved in a typical class situation through a program of interspersed testing, without the use of extensive apparatus or extended experimentation. Initially better readers showed the greater improvement. Changes in method of testing comprehension resulted in reduced reading speed.—*D. G. Ryans* (Cooperative Test Service).

1718. **Green, H. A., Jorgensen, A. N., & Gerberich, J. R.** *Measurement and evaluation in the secondary school.* New York: Longmans, Green, 1943. Pp. xxvi + 670. \$3.75.—This book is intended especially for the use of high school teachers and students of secondary education. It is essentially a completely revised and expanded treatment of an earlier volume which appeared in 1936 under the title of *The use and interpretation of high school tests*. Topics covered are: types and development of educational and mental tests; criteria of a good examination; construction of standardized tests; classroom use of standardized tests and oral and essay examinations; constructing and using informal objective tests; nature and measurement of intelligence; intelligence tests, personality instruments, and other techniques and tools in pupil guidance; tests in diagnosis and remedial teaching; measurement and remediation in English, in the receptive language art, in the foreign languages, and in the sciences; measurement in the social studies, in mathematics, fine arts, industrial and practical arts, business education, health and physical education, and general educational achievement; summarizing, interpreting, and using the results of testing; and tests and the classroom teacher.—*D. G. Ryans* (Cooperative Test Service).

1719. **Hakim, M. A.** *A study on correlation of marks.* *Indian J. Psychol.*, 1941, 16, 63-68.—Marks of 48 high school boys of Lucknow, India, in English, mathematics, vernacular, history, geography, science, drawing, and classics (Sanskrit and Persian) were

correlated. The correlations found were high for classics and vernacular, for English and mathematics, and for science and mathematics; they were low for mathematics and vernacular and for English and vernacular although the last two both involve linguistic ability.—*A. Weider* (New York University).

1720. **Harrower, G. J., & Cox, K. J.** *The results obtained from a number of occupational groupings on the professional level with the Rorschach group method.* *Bull. Canad. psychol. Ass.*, 1942, 2, 31-33.—Abstract.

1721. **Hester, K. B.** *A study of phonetic difficulties in reading.* *Elem. Sch. J.*, 1942, 43, 171-173.—Study of the records of 194 children with reading difficulties showed 58% lacking in knowledge of phonics, both of letter sounds and blends. Phonetic difficulties were most evident at the fourth and fifth grade levels.—*S. S. Sargent* (Barnard).

1722. **Jackson, G. T.** *Each according to his ability.* *Sch. Exec.*, 1943, 62, 37-38.—The method of grouping, and the special planning, treatment, and incentives used with pupils of low ability are described. The program has increased interest and effort, and reduced truancy and behavior problems.—*G. S. Speer* (Central YMCA College).

1723. **Johnson, W. H.** *The improvement of handwriting.* *Elem. Sch. J.*, 1942, 43, 90-96.—A survey of handwriting instruction methods in Chicago schools revealed unsatisfactory conditions. Experimental materials and techniques were tried out successfully in a number of schools for more than two years. Most valuable were the use of illustrations to accompany content, special materials to ease the transition from manuscript to cursive writing, and practice materials selected from regular school subjects.—*S. S. Sargent* (Barnard).

1724. **Kahn, S.** *How to learn and advance.* New York: Alpha Press, 1942. Pp. 114. \$2.00.—Advice and suggestions on how to study.—(Courtesy *Publishers' Weekly*).

1725. **Kavruck, S.** *A study of the relation of retardation in reading to test performance on the Revised Stanford-Binet, (Form L).* *J. educ. Res.*, 1942, 36, 221-223.—Two groups of delinquent boys, 50 boys in each group ranging in age from 13 to 16 years and in IQ from 66 to 112, were matched according to age and IQ. One group attained the expected standard in reading according to mental age, the other group was at least two years below the expected standard. The retarded group was inferior to the normal group in vocabulary, in defining abstract words, in the Minkus completion test, and in dissected sentences. They were superior in memory for designs, sentence memory, and in constructing a bead chain from memory.—*M. Murphy* (Pennsylvania).

1726. **Livesay, T. M.** *Subject preference as related to test intelligence, intended vocation, college expectation and race of high school seniors in Hawaii.* *J. educ. Res.*, 1942, 36, 178-184.—Data

are given for 2199 high school seniors. With respect to test scores of those preferring them the subjects ranged as follows from highest to lowest: mathematics, language, science, social studies, commercial, expression (agriculture, art, music, etc.). There was a tendency for students to choose a future occupation related to their favorite subject. Of those expecting to enter college the larger proportion preferred language, mathematics, science, and social studies. The sex preferences with few exceptions followed a fairly general pattern. Males favored mathematics, science, and social studies in larger proportions than females, with the reverse for the other subjects.—*M. Murphy* (Pennsylvania).

1727. **Markham, W. T.** Occupational guidance has six facets. *Sch. Exec.*, 1943, 62, 20-23.—Occupational guidance provides six services: an individual inventory, occupational information, counseling, exploration of training opportunities, placement, and follow-up. In addition, there are two basic principles: a guidance department cannot function alone, but requires the cooperation of other agencies and the community; and continuous adjustment is an essential.—*G. S. Speer* (Central YMCA College).

1728. **Marshman, C. S.** A comparative study of three teaching methods. *Bull. Canad. psychol. Ass.*, 1942, 2, 33.—Abstract.

1729. **Paterson, D. G., & Tinker, M. A.** Influence of line width on eye movements for six-point type. *J. educ. Psychol.*, 1942, 33, 552-555.—Eye movement photographs of two groups of 20 subjects each were studied. Retardation in rate of reading excessively short lines appears to be due to inability to make maximum use of horizontal peripheral cues. Excessively long lines are read less efficiently than lines of moderate length, the difficulty seeming to lie in the inability of the eyes to locate accurately the beginning of successive lines of print.—*D. G. Ryans* (Cooperative Test Service).

1730. **Rosander, A. C.** A simple method of scoring and interpreting sequential responses. *J. educ. Res.*, 1942, 36, 168-177.—The method described can be employed in scoring responses to questions which require that the answers be given in a specific order or sequence. Three scoring methods are suggested: the number of inversions; the discriminial score, i.e. the number of inversions minus the population (chance) mean; the maximum number of inversions possible minus the obtained number of inversions. Scoring keys for 4 elements and 5 elements are given.—*M. Murphy* (Pennsylvania).

1731. **Roucek, J. S., & others.** Sociological foundations of education; a textbook in educational sociology. New York: Crowell, 1942. Pp. x + 771. \$3.75.—This introductory text which presents "the sociological relationship of all types of human activities and institutions to organized educational efforts" represents the combined efforts of 30 specialists in their particular fields. In addition to an introduction, there are 32 chapters organized under Part I, basic elements in social and educational

processes, Part II, education and social control, and Part III, trends in educational sociology. Bibliographies follow each of the chapters, and there is a 26-page index.—*R. C. Strassburger* (St. Joseph's College for Women).

1732. **Roy, S. N.** A test for reading ability. *Indian J. Psychol.*, 1942, 17, 75-82.—This is a progress report of a reading test. Two passages from a Bengali textbook of matriculation have been modified for this oral reading test; one passage is for subjects up to the age of 12 and the other for those beyond that age level. Instructions and scoring standards are given, but no norms have as yet been devised.—*A. Weider* (New York University).

1733. **Salter, M. D.** Predicting the academic success of medical students. *Bull. Canad. psychol. Ass.*, 1942, 2, 34-35.—Abstract.

1734. **Schneidler, G. G., & Berdie, R. F.** Representativeness of college students who receive counseling services. *J. educ. Psychol.*, 1942, 33, 545-551.—Students from the various colleges and classes requesting counseling services at the University of Minnesota Testing Bureau are much like their classmates who do not seek such counseling in respect to aptitude for college work, high school scholarship, and achievement in English. With a special group of science, literature, and art freshmen, studied more extensively, it was found that the similarity between counseled and non-counseled groups was observable in widely different categories such as achievement in natural sciences, social studies, and mathematics; morale; social, family, and emotional adjustment; economic conservatism; measured interests; masculinity or femininity of interests; and occupational level. It is concluded that the University Testing Bureau is serving a typical cross-section of the total university population.—*D. G. Ryans* (Cooperative Test Service).

1735. **Schonell, F. J.** Backwardness in the basic subjects. Edinburgh: Oliver & Boyd, 1942. Pp. xix + 560. 18s.—[Abstracted review; original not seen.] This is a survey of more than 15,000 children in good, medium, and poor elementary schools in England. The subjects covered are reading, spelling, and composition. Those pupils who were over 1½ years backward in any specific subject, but who were normal or nearly so in other subjects, were singled out for study. Some 5½% of boys and 2½% of girls fell in this category, the proportions being larger in schools of poorer socio-economic status. Standardized achievement tests, many of which are published for the first time in the appendices to the book, were used. The discussion emphasizes the multiplicity of causes (intellectual, emotional, and environmental) in such backwardness. There are detailed exercises for remedial teaching of English.—*R. L. Solomon* (Brown).

1736. **Schrammel, H. E.** The purpose, origin, plan of procedure, and values of the Nation-Wide Every Pupil Scholarship Tests. *Trans. Kans. Acad. Sci.*, 1942, 45, 294-298.—In 1942, 44 new tests

were provided for the testing program, and some 750,000 copies were used by 1500 schools. The validity and reliability of these tests and the values accruing from the testing program are discussed.—*W. A. Varvel* (Texas A. & M.).

1737. **Simpson, R. H.** Reading disabilities among teachers and administrators. *Clearing House*, 1942, 17, 11-13.—See *Educ. Abstr.* 7: 1503.

1738. **Simpson, R. H.** Students help set up criteria to aid in deciding what to study. *J. educ. Res.*, 1942, 36, 192-199.—Suggestions on what to study in history of education and in educational psychology, worked out in cooperation with students.—*M. Murphy* (Pennsylvania).

1739. **Stroud, J. B.** Predictive value of obtained intelligence quotients of groups favored and unfavored in socio-economic status. *Elem. Sch. J.*, 1942, 43, 97-104.—Correlation between socio-economic status and both academic achievement and tested intelligence is about .40-.50. Pupils from underprivileged homes tend not to get on at school or learn quite as well as pupils of the same intelligence from homes higher in the socio-economic scale.—*S. S. Sargent* (Barnard).

1740. **Stuart, H. C.** The effect of college entrance delay on college grades. *Trans. Kans. Acad. Sci.*, 1942, 45, 302-303.—103 male graduates of a land-grant college who entered college one year after high school graduation were matched with two control groups entering college immediately. Grades for the first two years of college were studied. Grades of the experimental group significantly exceeded those of one control group but were not significantly above those of the other.—*W. A. Varvel* (Texas A. & M.).

1741. **Taba, H.** The evaluation of critical thinking. *Yearb. nat. Coun. soc. Stud.*, 1942, 13, 123-175.—The purposes of evaluating critical thinking are to improve the teaching of it, to discover the locus of difficulty for a particular student, and to improve the curriculum necessary for the development of critical thinking. The evaluation cannot be limited to paper and pencil tests, but must include observation and careful analysis of interests and behavior. Illustrations are given of several techniques for evaluating different aspects of critical thinking, including informal classroom methods and items from paper and pencil tests. The aspects of critical thinking considered are: skill in selecting, appraising, and organizing information; ability to interpret social data; ability to make use of social generalizations, facts, and values; and ability to analyze arguments critically. The appraisal should be carried on continuously so that progress may be noted. The techniques described are considered useful principally for teachers of social studies.—*B. E. Davis* (Brown).

1742. **Tarumianz, M. A., & Bullis, H. E.** A preventive mental hygiene program for schools. *Amer. J. Psychiat.*, 1942, 99, 398-405.—This is a discussion between the two authors, of the purposes and pro-

cedures of human relations classes held in the public schools of Delaware. The program is adaptable to all grades. Special attention is paid to the shy recessive child. There is a discussion of stimuli used in the teaching, topics discussed, and teaching techniques.—*R. Goldman* (Boston Psychopathic Hospital).

1743. **Traxler, A. E.** The use of test results in diagnosis and instruction in the tool subjects. *Educ. Rec. Bull.*, 1942, No. 18 (rev.). Pp. vii + 80.—This is a revision of the 1936 publication (see 11: 1505), bringing the lists of tests and reading references up to December, 1942.—*L. H. McCabe* (Cambridge, Mass.).

1744. **Traxler, A. E., & Selover, M. S.** Relationship of elementary-school achievement tests to achievement tests taken in the secondary school. *J. educ. Res.*, 1942, 36, 161-167.—Achievement tests given in the elementary school have some value for prediction of achievement in secondary school from 1 to 4 years later. In general the predictive value decreases with increase in the time interval, but up to 4 years the decrease is slight. The predictive value seems to be higher in the field of language than in the field of mathematics.—*M. Murphy* (Pennsylvania).

1745. [Various.] Report of the Commission on Post-War Training and Adjustment; a statement of the principles relating to the educational problems of returning soldiers, sailors and displaced war industry workers. New York: Institute of Adult Education, Teachers College, Columbia University, 1942. Pp. vii + 54.—The report urges action now to anticipate many of the problems of misallocation and economic maladjustment which can be remedied by efficient education. The problems of the future in guidance and placement, training, rehabilitation, and special problems are discussed. A plan for the administration and financing of the program is presented.—*R. L. Solomon* (Brown).

1746. **Williamson, M.** Supervision of group leaders: outlines for study and practice. New York: Womans Press, 1942. Pp. 60. \$0.60.—This pamphlet is intended as an aid to the supervisor of group leaders. Topics outlined and discussed are: the nature and importance of the initial interview; the place of observation in the supervisory process; factors involved in the supervisory conference; the nature and use of records in the supervisory process; and the supervisor as a learner as well as teacher. Each chapter is concluded with abstracts of related literature and annotated references.—*G. S. Speer* (Central YMCA College).

1747. **Zerfoss, K. P., & Moore, H. D.** The use of field studies in teaching educational psychology. *J. educ. Psychol.*, 1942, 33, 527-537.—Students taking a first course in educational psychology are directed in the observation and application of principles as they refer to various field activities in which the students are engaged. The chosen projects are discussed and later presented in written

report form.—D. G. Ryans (Cooperative Test Service).

[See also abstracts 1440, 1597, 1623, 1625, 1637, 1714.]

MENTAL TESTS

1748. Ghosh, S. P. Studies on the types of intelligence. *Indian J. Psychol.*, 1942, 17, 85-89.—Scores of 213 subjects, aged 11-20, on the Passalong and Formboard tests and on an Indian adaptation of forms L and M of the Terman-Merrill revision of the Binet test were correlated. The correlation between forms L and M was .84, and that between the two performance tests was also high. "In both performance and verbal abilities we have something in common, since their correlations are both positive and involve rational judgment; none of them is an independent psychological trait."—A. Weider (New York University).

1749. Hayes, S. P. Alternative scales for the mental measurement of the visually handicapped. *Outlook for Blind*, 1942, 36, 225-230.—It is recognized that the Hayes-Binet test of intelligence is inadequately standardized at both ends. The Wechsler-Bellevue gives a more adequate rating at the upper age levels. It also forms a basis for comparing the blind with the seeing since the verbal tests and the vocabulary test can be given to the blind practically without change. The validity and reliability of this abbreviated scale for use with the blind is discussed. An item analysis is given. In actual use with the blind the vocabulary test is substituted for the digits test since it is a better test of intelligence.—K. E. Maxfield (New York).

1750. Stump, N. F. The Stump Auditory Group Tests of Intelligence. *J. educ. Psychol.*, 1942, 33, 495-505.—The Stump Auditory Group Tests, measuring the ability to understand and reason by means of spoken words, and the capacity to listen keenly, are described. The tests may be presented orally or by electrical transcription. Estimates of reliability and validity, and age norms and percentiles are presented. The tests should be used to supplement other types of intelligence tests.—D. G. Ryans (Cooperative Test Service).

[See also abstracts 1604, 1725.]

CHILDHOOD AND ADOLESCENCE

1751. Amster, F. Differential use of play in treatment of young children. *Amer. J. Orthopsychiat.*, 1943, 13, 62-69.—Six uses of play activity in the treatment of children are defined, illustrated, and examined through excerpts of case material. Play can be used (1) for diagnostic understanding of the child, (2) to establish a working relationship, (3) to break through a child's defenses against anxiety, (4) to help a child verbalize certain conscious material and the associated feelings, (5) to help a child act out unconscious material and to relieve the accompanying tension, and (6) to develop a child's

play interests which he can carry over into his daily life and which will strengthen him for his future life. The therapeutic relationship is basic whether words or play activity is used as the medium in treatment.—R. E. Perl (Jewish Board of Guardians).

1752. Baruch, D. W. You, your children, and war. New York: Appleton-Century, 1942. Pp. xii + 234. \$2.00.—The special conditions of a war era give rise to a variety of problems. We must not make children ashamed to show fear since it is less damaging when boldly faced than when suppressed. The expression of hostility is natural to children, so the adult observer need not worry about it, but may learn from it of the children's personal needs. Too often we frustrate the growing individual by unnecessary restrictions; it should be remembered that the child feels more secure if he has convincing evidence of his parents' love. Young and old alike attain higher morale if they participate in the war effort. Agencies through which service may be rendered are listed and described. The problem of war marriages is a difficult one, which must always be settled on the basis of the individual case. The concluding chapter offers, in free verse form, a code for parents.—E. B. Mallory (Wellesley).

1753. Beattie, N. R., & Lowe, J. J. H. Evacuation and the difficult child. *Med. Offr.*, 1942, 67, 205-206.—See *Child Developm. Abstr.* 16: 715.

1754. Bigelow, M. A. Social hygiene and youth in defense communities. *J. soc. Hyg.*, 1942, 28.—See *Child Developm. Abstr.* 16: 716.

1755. Dixon, C. M. Keep them human: the young child at home. New York: John Day, 1942. Pp. 165. \$1.50.—See *Child Developm. Abstr.* 16: 905.

1756. Gastwirth, P., & Silverblatt, J. Reactions of junior high school children to the war. *High Points*, 1943, 25, 59-63.—30 children, constituting a representative sampling of sixth grade children, were individually questioned about the war. No sex differences were found, and no significant IQ differences, except that the high IQ's tended to conceal their fears. In general, the group was found to have "persistent fears, anxieties, and forebodings arising from the war situation." They were more willing to express their fears about the war than they were to express other fears.—G. S. Speer (Central YMCA College).

1757. Lourie, R. S., Barrera, S. E., & Strongin, E. I. Autonomic nervous system function in children with behavior problems as measured by the parotid secretory rate. *Amer. J. Psychiat.*, 1942, 99, 419-425.—"In the parotid secretory rate we have a measure of the parasympathetic effect on the gland's secretory activity, and we might expect that anything that would produce changes in parasympathetic function would produce corresponding changes in secretory rate. This would include of course the effects of higher brain centers in modifying parasympathetic activity." 69 boys and 28 girls, ages 6-14, were studied. 52 of the children (53%) had rates that fell within the normal range

(0.30 cc. or less per 5 minutes), 25 cases had moderately high rates, and 20 had extremely high rates (0.50-1.00 cc. per 5 minutes). On the basis of change in behavior symptoms, the great majority of the children within the normal secretion range were symptom-free or improved, 68% of the moderately high rate group were unimproved, and none of the third group showed any improvement.—*R. Goldman* (Boston Psychopathic Hospital).

1758. Masani, K. R. Play therapy in child psychiatry. *Indian J. soc. Work*, 1942, 3, 61-71.

1759. Menon, T. K. N. Introspection and reasoning in children. *Indian J. Psychol.*, 1942, 17, 59-64.—The writer presents results from Indian children, 7-9 years of age, on ego-centrism as postulated by Piaget to explain children's reasoning. He finds it incorrect to say that the child of 7-9 cannot introspect. Piaget's three types of answers corresponding to three stages in the evolution of children's introspection were not verified.—*A. Weider* (New York University).

1760. Moreno, F. B. Sociometric status of children in a nursery school group. *Sociometry*, 1942, 5, 395-411.—12 children, aged 2-5 years, were studied during their second month in a nursery school. Spontaneous activities were observed and recorded for a total of 35 hours over a 4-week period; verbal choice of partners was tested on 9 occasions; finally, experimental controls were introduced by removing certain children from the group and observing the activities of the remaining subjects. Illustrative results are presented by means of interrelation matrices, sociograms, a graph, and statistical tables. The author concludes: "1. Children of pre-school age develop a significant social [sociometric] status in groups of their own making. . . . 2. There are persistent patterns of attractions and repulsions characteristic for a child at different points in time. There are children of high and children of low sociometric status. 3. Children develop varying degrees of intensity of relationship for one another. . . . By means of experimental devices which exclude certain children from the group, these various levels of preferences come to the fore."—*G. R. Thornton* (Purdue).

1761. Nicholson, M. B. Developmental difficulties in children under three. *Amer. J. Orthopsychiat.*, 1943, 13, 45-53.—On the basis of a study of 30 cases of problem children under 3 years of age, in some of which cases the author interviewed the mother and in most of which he was the child's therapist, the course of therapy with young children is described. A discussion by M. Getelson follows the paper.—*R. E. Perl* (Jewish Board of Guardians).

1762. Pascual del Roncal, F. Manual de neuropsiquiatria infantil. (Manual of child neuropsychiatry.) México, D. F.: Fondo de Cultura Económica, 1940. Pp. 378. \$8.00.—[Abstracted review; original not seen.] This is the first work in Spanish on neuropsychiatric problems of childhood. It covers a wide range of the numerous mental dis-

turbances which comprise a growing field.—*H. D. Spoerl* (American International College).

1763. Patri, A. Your children in wartime. Garden City, N. Y.: Doubleday, Doran, 1943. Pp. 124. \$1.50.—Advice and counsel on the upbringing of children in wartime. Arranged in three sections: for parents, for teachers, and for children.—(*Courtesy Publishers' Weekly*).

1764. Pátzay-Liebermann, L. Infantile Angstneurose. (Infantile anxiety neurosis.) *Z. Kinderpsychiat.*, 1942, 9, 65-71.—In the comparatively rare instances of genuine psychosis of childhood, some disturbance of the mother-child relationship is usually a major factor. The case of a 7-year old girl who suffered from intense fears and anxieties is described. In cases such as this treatment must begin with the parent, for in the affective relations between mother and child is to be found the true dynamic basis upon which later emotional development will depend.—*F. L. Goodenough* (Minnesota).

1765. Rheingold, H. L. Mental and social development of infants in relation to the number of other infants in the boarding home. *Amer. J. Orthopsychiat.*, 1943, 13, 41-45.—Babies who have been raised as only babies in a boarding home do better on tests such as the Gesell and make a better social adjustment to an examiner than babies who have shared the boarding home with other babies.—*R. E. Perl* (Jewish Board of Guardians).

1766. Seeberg, E. Analysis of aggression in a five year old girl. *Amer. J. Orthopsychiat.*, 1943, 13, 53-62.—This case study of aggression brought about by an Oedipal conflict demonstrates that overt aggressive behavior in a child can be corrected without its repetitious release in the first person toward the therapist, on the basis of an emotional relationship favorable to a maximal consideration of content.—*R. E. Perl* (Jewish Board of Guardians).

1767. Smith, R. M. Children in war time. *Amer. J. Dis. Child.*, 1942, 64, 497-504.—For aspects of the war which directly affect children are discussed: danger zones, acceleration of industry, expansion of the armed forces, and war itself. Among several specific recommendations the following are of psychological interest: extension of the amount of day care and augmentation of recreational facilities, and expansion of the child guidance program.—*L. Long* (City College, New York).

1768. Wintsch, J. Notes sur l'écriture renversée. (Notes on mirror writing.) *Z. Kinderpsychiat.*, 1942, 9, 82-86.—The case of a pair of monozygotic male twins is described, who, at the age of 7 years, showed a marked tendency toward reversed and inverted writing. One of the twins, in attempting to read, usually reversed the position of the book when placed before him in the normal position. Most of their drawings were made upside down. Theoretical explanations of this phenomenon are discussed.—*F. L. Goodenough* (Minnesota).

[See also abstracts 1447, 1450, 1470, 1485, 1562, 1587, 1610, 1633, 1664, 1675.]

PSYCHOLOGICAL REVIEW

1892 - 1942

A limited number of the January 1943 issue of PSYCHOLOGICAL REVIEW has been bound in cloth.

It contains the papers commemorating the one hundredth anniversary of the birth of William James.

This number, *Volume 50, Number 1*, also contains the papers celebrating the fiftieth anniversary of the American Psychological Association.

PARTIAL CONTENTS OF JUBILEE NUMBER

Edited by Sidney Langfeld

<i>Toastmaster's Speech</i>	C. E. SEASHORE
<i>The Adolescence of American Psychology</i>	R. S. WOODWORTH
<i>The American Psychological Association: 1892-1942</i>	S. W. FERNBERGER
<i>American Psychology in the '80's and '90's</i>	J. JASTROW
<i>Wundt and Leipzig in the Association's Early Days</i>	G. M. STRATTON
<i>Titchener and James</i>	W. B. PILLSBURY
<i>Early Days of Comparative Psychology</i>	R. M. YERKES
<i>A Perspective on American Psychology</i>	W. KOHLER
<i>Toastmaster's Speech</i>	J. R. ANGELL
<i>James' Influence on the Psychology of Perception and Thought</i>	E. L. THORNDIKE
<i>The Productive Paradoxes of William James</i>	G. W. ALLPORT
<i>The PRINCIPLES</i>	JOHN DEWEY
<i>James the Psychologist—As a Philosopher Sees Him</i>	R. B. PERRY
<i>A Student's Impressions of James in the Late '80's</i>	E. B. DELABARRE
<i>A Student's Impressions of James in the Middle '90's</i>	E. D. STARBUCK
<i>Another Student's Impressions of James at the Turn of the Century</i>	R. B. ANGIER

Price \$2.50

Address orders to

The American Psychological Association, Inc.

NORTHWESTERN UNIVERSITY

EVANSTON, ILLINOIS

THE CENTURY PSYCHOLOGY SERIES

PRINCIPLES OF BEHAVIOR

By

CLARK L. HULL, Ph.D.
Yale University

THE primary purpose of this new introduction to behavior theory, which may well become a classic in its field, is to explain the basic principles of behavior by means of precise and objective formulations. The point of view throughout is that of objective natural science. The method of treatment is for the most part straightforward exposition, with frequent concrete examples. This book presents the first genuine theory of primary motivation ever formulated, the only formulation of configurational learning, and the first adequate formulation of behavioral oscillation. It is admirably designed to serve as a text in university and college advanced courses in psychology.

Large 8vo Illustrated 420 pages

D. APPLETON-CENTURY COMPANY
35 West 32nd Street
New York City

Changes of Address

must be in the Publications Office by the 15th of the month preceding the issue to be affected.

JOURNAL OF ABNORMAL AND
SOCIAL PSYCHOLOGY

JOURNAL OF EXPERIMENTAL
PSYCHOLOGY

PSYCHOLOGICAL ABSTRACTS

PSYCHOLOGICAL BULLETIN

PSYCHOLOGICAL MONOGRAPHS

PSYCHOLOGICAL REVIEW

JOURNAL OF APPLIED
PSYCHOLOGY

Publications Office

The American Psychological Association, Inc.
Northwestern University, Evanston, Illinois

PHILOSOPHIC ABSTRACTS

Dagobert D. Runes, Editor

A cumulative index of significant book and periodical literature in philosophy.

Brief reviews reflecting the opinions of the author rather than those of the reviewer.

Covering sine ira et studio all schools of philosophy.

Regular reports, in spite of the present difficulties in communication, from all parts of the world.

Welcomed by librarians as an authentic bibliographical aid; by teachers as a practical guide; by research men as an invaluable source of material.

Those desiring to keep the **Abstracts** with the first issue as a permanent record of philosophic research may send their reservations together with a remittance of \$4 for one year, or \$7 for two years (foreign subscribers remit an additional \$1 per annum), to Philosophic Abstracts, 884 Riverside Drive, New York, N. Y.

You may inspect a sample copy at your nearest university library.

